Research protocol: part 1

Title

Evaluation for effectiveness of lidocaine with epinephrine irrigation in reducing acute pain from surgical removal of mesioangular-impacted third molars

Project Summary

Postoperative pain is a common side effect of mandibular third molar surgery. Consequently, local anesthetics must be applied to the area of the surgical incision before suturing to relieve any associated levels of pain. Thus, this study aimed to compare the efficacy of lidocaine and bupivacaine in combination with vasoconstrictors in managing local pain and trismus following impacted third molar surgery. Participants aged 18-25 years with similar lower impacted third molars were randomly divided to receive 2% lidocaine or 0.5% bupivacaine (n = 17 each) post-operatively. Either molar side was randomly selected for the initial surgery and flushed with anesthetics before suture removal. Patients were then evaluated for pain levels using the Visual Analog Scale (VAS) tool and asked to respond to questionnaires at two, four, six, and eight hours. Another tooth was surgically extracted after four weeks and patients were again monitored, as they had been for the previous surgery. The findings imply that bupivacaine could alleviate the pain associated with mandibular third molar surgery more effectively than lidocaine.

General Information

Protocol title:

Anesthetic Efficacy of Lidocaine and Bupivacaine Following Lower Third Molar Extraction: A Comparative Evaluation (Certificate Number: 42/2016, Date: August 24th, 2016).

Name and address of the sponsor/funder:

Residency Training Program in Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University.

Name and title of the investigator(s):

Investigator	Address	Responsibility
1. Vuttinun Chatupos, D.D.S. Assistant Professor	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Supervisor, Surgeon, Conceptualization, Ethics, Consent information, Project administration, Discussion
2. Sumatee Yuthavong, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry,	Clinical investigator, Dentist, Data collector

	Chiang Mai University, Chiang Mai, Thailand	
3. Yanisa Naruenartwongsakul, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Clinical investigator, Dentist, VAS measurement, Data collector
4. Pratchanun Sanjitt, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Clinical investigator, Dentist, VAS measurement, Data collector
5. Mayuree Kuraoka, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Clinical investigator, Dentist, VAS measurement, Data collector
6. Ittiwat Pooripoosit, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Clinical investigator, Dentist, VAS measurement, Data collector
7. Pakamon Chutchawalkijkul, D.D.S.	Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand	Clinical investigator, Dentist, VAS measurement, Data collector
8. Pattaranee Srichairatanakool, MD.	Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand	Conceptualization, Anesthesiologist, Clinical investigator
9. Wachiraporn Tipsuwan, PhD. Assistant Professor	Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand	Researcher, Data analysis, Report writing, Discussion
10. Somdet Srichairatanakool, Ph.D. Professor	Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand	Conceptualization, Researcher, Data analysis, Report writing, Discussion

26 ***Name(s) and address(es) of the clinical laboratory:***

1. Out-Patient Department Number 3, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand

2. Oxidative Stress Laboratory, Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai Thailand

Rationale & Background Information

Mandibular third molars typically erupt in humans between 18 and 24 years of age. Accordingly, the lower third molar will commonly become impacted and will have to be removed. However, discomfort and certain adverse effects may occur following an impacted tooth extraction such as edema, numbness, and excessive bleeding. Pain is the most prevalent problem following impacted tooth extractions [1, 2], which is a complex phenomenon characterized by a substantial subjective component and is dependent upon several endogenous and exogenous factors [3]. Pain perception affects individuals differently depending upon certain psychosocial biological variables [4]. The pain experienced from dental extraction and dental anesthesia can produce different responses among patients.

In clinical use, local anesthesia (LA) can relieve the pain associated with certain surgical procedures, but their use may also become a source of anxiety and may contribute to the discomfort a patient undergoes [5]. Lidocaine or 2-(diethylamino)-N-(2,6-dimethylphenyl) acetamide is a common local anesthetic drug that is widely used in dentistry to alleviate the sensation of pain generating from specific body areas during surgery or dental work. Functionally, lidocaine blocks the fast voltage-gated Na^+ channels in nerve cell membranes to prevent the initiation and conduction of nerve impulses that transmit pain signals to the brain [6]. Regarding its bioavailability, elimination half- life values of lidocaine are approximately 15-2 hours for intravenous administration and 1.5-2.5 hours for subcutaneous administration [7]. However, certain side effects, including redness, swelling, itching, dizziness, drowsiness, nausea, and, rarely, severe allergic reactions, have been observed [8]. Tuffin and colleagues have previously reported that 0.75% bupivacaine reduced pain scores after impacted tooth extraction but did not decrease the degree of analgesic drug intake [9]. In addition, Reza et al. found that irrigation of the tooth socket with 0.5% bupivacaine after removal of the impacted third molar could significantly reduce the discomfort of the patient when compared to normal saline irrigation [1].

These outcomes demonstrate that local anesthesia for impacted tooth lesions can effectively reduce short-term sensations of pain after surgery [10]. The previous research findings also indicate that the anesthetic can penetrate the oral mucosa. Smeared or sprayed local anesthetics, such as lidocaine, benzocaine, and butacaine, only numb the epithelium, while the deeper tissues cannot be anesthetized. A visual analog scale (VAS) is a pain-rating scale that is often used in dentistry and clinical research to measure the intensity or frequency of pain, specifically the pain associated with postoperative tooth extraction [11-13].

Hypothesis

Lidocaine would exert not only systemic anesthetic but also local anti-pain property to be used in postoperative patients with mesioangular impacted molars.

Study Goals and Objectives

1. To select the appropriate local anesthetic for mandibular third molar surgery

2. To evaluate and compare the analgesic effects of lidocaine and bupivacaine after mandibular third molar surgery
3. To compare anti-pain and would healing effects of lidocaine plus epinephrine irrigation with NSS solution irrigation in patients after surgical removal of mandibular third molars

Ethics

This study received approval from the Human Experimentation Committee Research Institute for Health Sciences and signed by Professor Dr. Anak Iamaroon, D.D.S., M.S., Ph.D., a Chairman of the Committee, Faculty of Dentistry, Chiang Mai University, Chiang Mai 50200, Thailand (Certificate Number: 52/2014 (52/2557 for Thai version), Date: 3rd December 2014 and Certificate Number: 42/2016, Date: 24th August 2016). Adherence to ethical guidelines was a prime importance throughout the study process. All patients were fully informed about the particulars of the study and willingly provided their signatures on the consent forms before any study procedures were performed. This study followed the guidelines of the Helsinki Declaration 2008, revised in 2013: Ethical Principles for Medical Research Involving Human Subjects. Subjects' rights have been protected by an appropriate Institutional Review Board and written informed consent was granted from all subjects.

Study Design

Subjects: All A total of 34 patients who were orthodontically indicated for bilateral impacted lower molar extraction were chosen for this study. The participants were enrolled at Out-Patient Department Number 3, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand between 01/10/2014 and 30/09/2016. The patients' mouths were divided into two sections, one section was bathed with lidocaine (n = 17) and the other was doused with bupivacaine (n = 17).

Inclusion Criteria:

Individuals aged between 18 and 25 years were included in this study who were systemically deemed to be healthy and orthodontically indicated for impacted lower third molar on both sides as depicted in panoramic radiographs. Individuals were selected who were non-allergic to amoxicillin and paracetamol and who had not previously experienced inflammation or infection of the teeth and gums around the lower molars before treatment.

Exclusion Criteria:

Individuals with a history of neurological disorders, allergies to lidocaine and bupivacaine, and those who had received steroid medication were excluded from the study.

Discontinuation Criteria:

- Patients could give up or withdraw from the study at any time.
- Unable to revisit for next follow-up

Methodology

Sample Size Calculation

This is a comparative study that endeavors to identify the anesthetic and analgesic properties of lidocaine and bupivacaine. Sample size was calculated by using the STATA® version 16.0 software (StataCorp, LLC, College Station, TX, USA). A total of 34 patients who were

orthodontically indicated for bilateral impacted lower molar extraction were chosen for this study. The participants were enrolled at Out-Patient Department Number 3 (OPD 3), Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand between September 2019 and March 2020. This study was conducted after obtaining written informed consent from all participants and ethical approval from the Institutional Human Experimentation Committee.

Study Intervention

The patients' mouths were divided into two sections, one section was bathed with lidocaine (n = 17) and the other was doused with bupivacaine (n = 17). The time was recorded when the inferior alveolar nerve block was initiated with anesthetics in combination with the vasoconstriction drug. Each step of the wisdom tooth extraction process was timed, beginning with the flap opening, and subsequently, bone filling, tooth division, and root picking (for fractured roots) on both sides of the mouth. Both the amounts of anesthetics that were administered and the number of sutures used were recorded. Before sealing the flap, the lingual and buccal sites were thoroughly dried with gauze and any blood was suctioned away. Afterward, the wound was rinsed with 3.6 mL of 2% lidocaine or 0.5% bupivacaine (double-blind operation) with epinephrine (1:200,000) for 3-5 minutes, and then aspirated with the anesthetic drug. The participants were instructed to care for their wounds following wisdom tooth extraction, record pain levels using the VAS tool at 2, 4, 6, and 8 hours, and complete the study on the day of the stitch-off. In terms of medication, subjects were prescribed to take one capsule of amoxicillin (500 mg) after meals and before bedtime with or without one paracetamol (500 mg) tablet every 6 hours. If taken, the amount and duration of the paracetamol being prescribed were recorded. Three weeks later, molar extraction on the other side of the mouth was scheduled and performed as has been previously described. The consolidated standards of the reporting trial (CONSORT) flow diagram for this study have been presented in Figure *1*.

Postoperative Medication

Regarding medication, subjects were prescribed one ampicillin capsule after meals and before bedtime with or without one paracetamol tablet every 6 hours. If taken, the amounts and duration of the paracetamol being prescribed were recorded. Three weeks later, molar extraction on the other side of the mouth was scheduled and performed as has been previously described. The consolidated standards of the reporting trial (CONSORT) flow diagram of this study have been presented in Figure *1*.

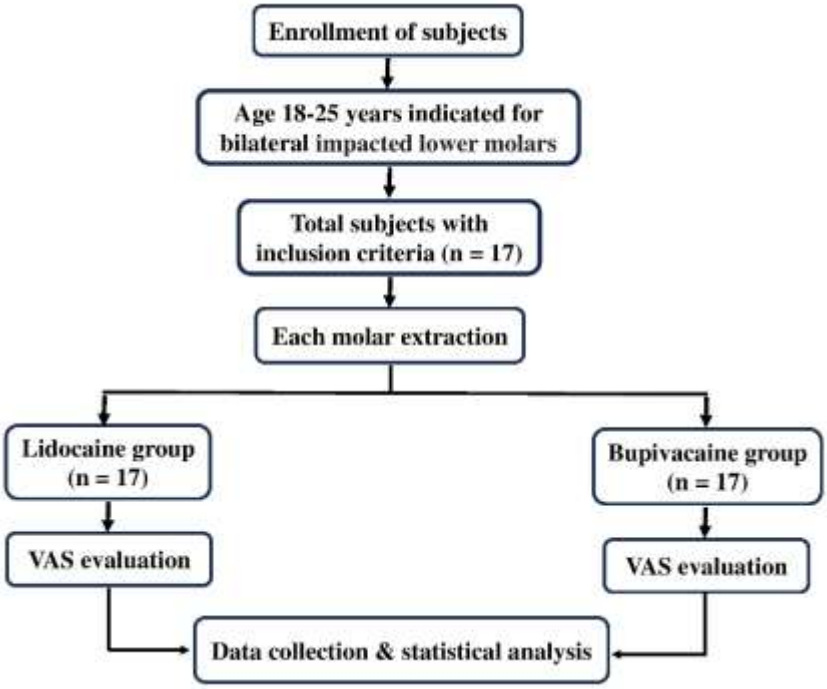

FIGURE 1: CONSORT flow diagram of the study design. CONSORT = consolidated standards of the reporting trial.

VAS Assessment

The degree of pain intensity that subjects felt was marked on a VAS of 0-10, with 0 being no pain and 10 representing maximum pain [11]. For evaluation, a VAS recording sheet was used by the researcher to record pain levels at appropriate time intervals covering 2-8 hours post-operation, according to the frequency and severity of each patient's pain.

Data Management and Statistical Analysis

Data were analyzed and the statistical significance was determined using the SPSS Statistics version 22 program (IBM, SPSS Inc., Chicago, IL, USA), for which the significance was set at $p < 0.05$. Repeated measures for analysis of variance (ANOVA) were used to compare the overall treatment effects of bupivacaine and lidocaine in terms of pain intensity (VAS score) at various time intervals following molar extraction. A paired Student's t-test was used to compare the median scores of pain intensity at various time intervals after the alveolar nerve block was initiated. When the data were not indicative of normal distribution levels, a non-parametric Wilcoxon Signed Rank test was used to compare the mean pain scale values between the two drugs.

References

1. Khorshidi Khiavi R, Pourallahverdi M, Pourallahverdi A, Ghorani Khiavi S, Ghertasi Oskouei S, Mokhtari H: **Pain control following impacted third molar surgery with bupivacaine irrigation of tooth socket: a prospective study**. *J Dent Res Dent Clin Dent Prospects* 2010, **4**(4):105-109.

2. Kasapoğlu Ç, Brkic A, Gürkan-Köseoğlu B, Koçak Berberoğlu H: **Complications Following Surgery of Impacted Teeth and Their Management**. In., edn.; 2013: 3-26.
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4. Fillingim RB: **Individual differences in pain: understanding the mosaic that makes pain personal**. *Pain* 2017, **158 Suppl 1**(Suppl 1):S11-S18.
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7. Lee W, Hahn K, Hur J, Kim Y: **Effect of Topical Lidocaine Patch on Postoperative Pain Management in Laparoscopic Appendectomy: A Randomized, Double-Blind, Prospective Study**. *J Laparoendosc Adv Surg Tech A* 2018, **28**(9):1061-1067.
8. Daraz YM, Abdelghffar OH: **Lidocaine Infusion: An Antiarrhythmic With Neurologic Toxicities**. *Cureus* 2022, **14**(3):e23310.
9. Tuffin JR, Cunliffe DR, Begg R, Shaw SR: **Does bupivacaine irrigation of third molar sockets reduce postoperative pain? A double blind controlled trial**. *Br J Oral Maxillofac Surg* 1990, **28**(2):96-98.
10. Wang YH, Wang DR, Liu JY, Pan J: **Local anesthesia in oral and maxillofacial surgery: A review of current opinion**. *J Dent Sci* 2021, **16**(4):1055-1065.
11. Surin W, Chatiketu P, Hutachok N, Srichairatanakool S, Chatupos V: **Pain intensity and salivary alpha-amylase activity in patients following mandibular third molar surgery**. *Clin Exp Dent Res* 2022.
12. Luo Z, Zeng W, Chen X, Xiao Q, Chen A, Chen J, Wang H, Zhou Z: **Cocktail of Ropivacaine, Morphine, and Diprospan Reduces Pain and Prolongs Analgesic Effects after Total Knee Arthroplasty: A Prospective Randomized Controlled Trial**. *Int J Clin Pract* 2024, **2024**:3697846.
13. Carr MP, Horton JE: **Clinical evaluation and comparison of 2 topical anesthetics for pain caused by needle sticks and scaling and root planing**. *J Periodontol* 2001, **72**(4):479-484.

Quality assurance

The protocol should describe the quality control and quality assurance system for the conduct of the study, including guideline for clinical practice (GCP), follow up by clinical monitors, data and safety monitoring board (DSMB) guidelines, data management etc.

Expected outcomes of the study

1. Bupivacaine could alleviate pain after mandibular third molar surgery more effectively than lidocaine
2. Irrigation of lidocaine combined with epinephrine could be more effective than normal saline solution in suppressing and relieving acute postoperative pain in patients undergoing the surgical removal of impacted mesioangular third molars

3. Irrigation of lidocaine combined with epinephrine could promote the periodontal healing of in patients with post-operational molar extraction(s)

Dissemination of results and publication policy

The protocol should specify not only dissemination of results in the scientific media, but also to the community and/ or the participants, and consider dissemination to the policy makers where relevant. Publication policy should be clearly discussed- for example who will take the lead in publication and who will be acknowledged in publications, etc.

Duration of the project: 2 years and 9 months (01/10/2014 – 30/06/2017)

Activities	2014	2015				2016				2017	
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Jan-Mar	Apr-Jun
1. Wrote a study protocol											
2. Submitted a proposal for human experimentation											
3. Revised the proposal											
4. Approved the Human Ethical Clearance											
5. Lidocaine plus epinephrine irrigation vs NSS											
5.1 Recruited patients with impacted third molar											
5.2 Surgical removal of lower mandibular molars											
5.3 Assessed VAS values											
5.4 Data analysis											
6. Comparison between bupivacaine and lidocaine											
6.1 Recruited patients with impacted third molar											
6.2 Approved the Human Ethical Clearance											
6.3 Surgical removal of lower mandibular molars											
6.4 Assessed VAS values											
6.5 Data analysis											
7. Report results to the ethical committee											

Problems anticipated

This section should discuss the difficulties that the investigators anticipate in successfully completing their projects within the time frame stipulated and the funding requested. It should also offer possible solutions to deal with these difficulties.

Project management

Investigator	Responsibility
1. Vuttinun Chatupos, D.D.S. Assistant Professor	Supervisor, Surgeon, Conceptualization, Ethics, Consent information, Project administration, Discussion
2. Sumatee Yuthavong, D.D.S.	Clinical investigator, Dentist, Data collector
3. Yanisa Naruenartwongsakul, D.D.S.	Clinical investigator, Dentist, VAS measurement, Data collector
4. Pratchanun Sanjitt, D.D.S.	Clinical investigator, Dentist, VAS measurement, Data collector

5. Mayuree Kuraoka, D.D.S.	Clinical investigator, Dentist, VAS measurement, Data collector
6. Ittiwat Pooripoosit	Clinical investigator, Dentist, VAS measurement, Data collector
7. Pakamon Chutchawalkijkul	Clinical investigator, Dentist, VAS measurement, Data collector
8. Pattaranee Srichairatanakool	Conceptualization, Anesthesiologist, Clinical investigator
9. Wachiraporn Tipsuwan	Researcher, Data analysis, Report writing, Discussion
10. Somdet Srichairatanakool, Ph.D. Professor	Conceptualization, Researcher, Data analysis, Report writing, Discussion

Ethics

Ethical approval for this project was granted by the Human Experimentation Committee of the Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand **(Certificate Number: 52/2014 (52/2557 for Thai version), Date: 3rd December 2014 and Certificate Number: 42/2016, Date: 24th August 2016)**. All patients were fully informed about the particulars of the study and willingly provided their signatures on the consent forms before any study procedures were performed. This study followed the guidelines of the Helsinki Declaration 2008: Ethical Principles for Medical Research Involving Human Subjects. Subjects' rights have been protected by an appropriate institutional review board and written informed consent was granted by all subjects.

Informed Consent Form (ICF)

Title of Study: Evaluation for effectiveness of lidocaine with epinephrine irrigation in reducing acute pain from surgical removal of mesioangular-impacted third molars

Purpose of Study: To select the appropriate local anesthetic for mandibular third molar surgery and evaluate and compare the analgesic effects of lidocaine and bupivacaine after mandibular third molar surgery.

Principal Investigator

Name: Dr. Vuttinun Chatupos, D.D.S. Academic Position: Assistant Professor

Office: Department of Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University, Chiang Mai 50200, Thailand.

Telephone: +66 53 944454

Email: vuttinunch@yahoo.co.th

Signature 

(Dr. Vuttinun Chatupos, D.D.S.)

Date 05 Jan 2015

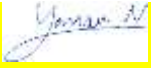
Participant 1 (Code MF14)

I, น.ส. วันวิสา หายโศรก **Age 20.4 years old**, **HN 6613298** Village No. …… Subdistrict…… District…… Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

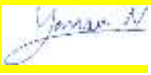
- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 1** (วันวิสา หายโศรก)

Date 05 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 05 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S, Email: fai.fai.yanisa@gmail.com

Participant 2 (Code MF15)

I, น.ส. ภูริชญา กาพพรรณลึก **age 22.7 years old, HN: 6702840** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information

for academic purposes. Including future use of medical information or pharmaceutical research only.

- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

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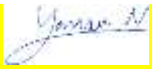
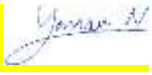
Signature  On behalf of **Participant 2** (น.ส. ภูริชญา กาฬพรรณลึก)

Date 05 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 05 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S, Email: fai.fai.yanisa@gmail.com

Participant 3 (Code MF16)

I, น.ส. เกษกนก เรืองกูล **age 20.4 years old, HN: 6512855** Village No. ……..
Subdistrict…….. District…….. Province……..
read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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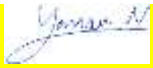
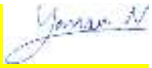
Signature  On behalf of **Participant 3** (**น.ส.** เกษกนก เรืองกูล)

Date 05 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 05 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 4 (Code MF17)

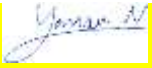
I, นาย ธนโชติ สิริจำรัสสกุล **age 24.6 years old**, **HN: 6704920** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the

research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

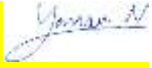
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 4** (นาย ธนโชติ สิริจำรัสสกุล)

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

Date 08 Jan 2015

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

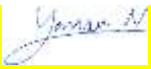
Participant 5 (Code MF18)

I, น.ส. อรพลินทร ทองเอก **age 19.8 years old**, **HN: 6702948** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

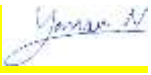
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 5 (น.ส. อรพลินทร ทองเอก)**

Date 08 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**),** Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 6 (Code MF19)

I, **น.ส. ระลิพภรณ์ กาฝากทอง age 19.9 years old**, **HN 6703379** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
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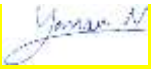
to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.

- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

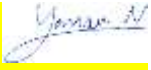
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 6 (น.ส. ระลิพภรณ์ กาฝากทอง)**

Date 08 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**.,** Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 7 (Code MF20)

I, น.ส. วนิชา ยาละ **age 23.6 years old, HN 6703661** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity

to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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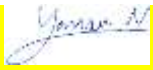
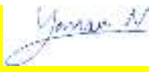
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 7 (น.ส. วนิชา ยาละ)**

Date 08 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**),** Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 8 (Code MF21)

I, นาย สหรัฐ อิวชาวนา **age 24.2 years old, HN 6611411** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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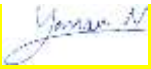
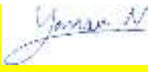
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 8 (นาย สหรัฐ อิวชาวนา)**

Date 08 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**),** Email: fai.fai.yanisa@gmail.com
I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 9 (Code MF22)

I, นาย เกริกกรรชัย คุณาธารกุล **age 23.5 years old**, **HN 6704031** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.
I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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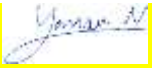
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording

information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.

- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

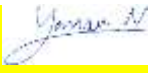
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 9** (นาย เกริกกรรชัย คุณาธารกุล)

Date 08 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 08 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 10 (Code MF23)

I, น.ส. ขวัญทิพย์ วรบุตร age 23.6 years old, **HN 6509153** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
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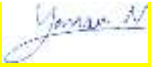
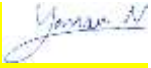
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 10** (น.ส. ขวัญทิพย์ วรบุตร)

Date 12 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 12 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 11 (Code MF24)

I, น.ส. กันยารัตน์ ยะวัน **age 21.5 years old, HN 6612488** Village No. ……..

Subdistrict…….. District…….. Province……..

read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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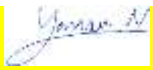
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

I have read all the information and am willing to participate in the clinical research study.

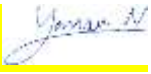
Signature  On behalf of **Participant 11 (น.ส. กันยารัตน์ ยะวัน)**

Date 12 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**),** Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that

will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 12 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 12 (Code MF25)

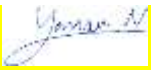
I, น.ส. ยุพารัตน์ อุตเสน **age 21.7 years old**, **HN 6609696** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.

- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

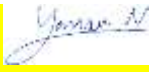
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 12** (**น.ส.** ยุพารัตน์ อุตเสน)

Date 12 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 12 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 13 (Code MF26)

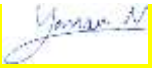
I, นายธชวรรณ เตชกาญจนารักษ์ **age 20.7 years old, HN 6604757** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

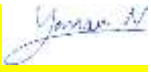
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 13** (น.ส. ธชวรรณ เตชกาญจนารักษ์)

Date 12 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 12 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

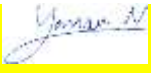
Participant 14 (Code MF1)

I, นายณัฐดนัย ศิริแก้ว **age 21.5 years old, HN 6304573** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

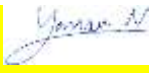
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 14** (นายณัฐดนัย ศิริแก้ว)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 15 (Code MF2)

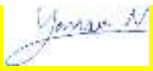
นายดชวิชญ์ อนุศาลนนันท์ **age 21.9 years old, HN 6304449** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial

Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

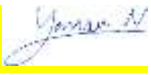
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 15 (นายดชวิชญ์ อนุศาลนนันท์)**

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S**),** Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 16 (Code MF27)

I, นาย คุณานนต์ สายวงค์อินทร์ **age 19.8 years old**, **HN 6500101** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

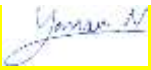
I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be

permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.

- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

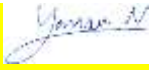
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 16** (นาย ดุฉานนต์ สายวงค์อินทร์)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 17 (Code MF28)

I, นาย ยชุรเวท รอดประยูร **age 21.5 years old**, **HN 6700592** Village No. …… Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from

the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
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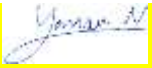
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

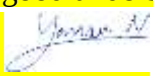
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 17** (นาย ยชุรเวท รอดประยูร)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

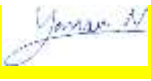
Participant 18 (Code MF3)

I, นายธนพร แหทรัพย์ age 22.6 years old, HN 6304676 Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

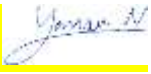
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 18** (นายธนพร แหทรัพย์)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 19 (Code MF4)

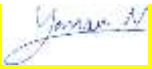
I, น.ส. ปรารถนา เกษณา age **20.8 years old, HN 6304676** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.

- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

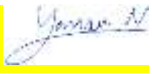
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 19** (**น.ส.** ปรารถนา เกษณา)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

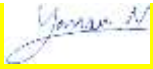
Participant 20 (Code MF5)

I, ธัญวิทูร เชื่อนสกุล **age 25 years old, HN 6304801** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

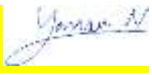
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 20** (ธัญวิทูร เชื่อนสกุล)

Date 15 Jan 2015

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 15 Jan 2015

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

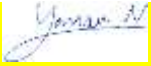
Participant 21 (Code MF6)

I, นางสาวสุพัตรา กรรเกษ **age 20.8 years old**, **HN 6304793** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

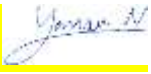
- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 21** (นางสาวสุพัตรา กรรเกษ)

Date 09/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com
I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 09/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 22 (Code MF7)

I, นางสาวรวี ปาฟอง **age 20.9 years old, HN 6200038** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

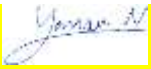
I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information

for academic purposes. Including future use of medical information or pharmaceutical research only.

- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

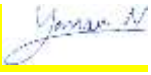
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 22** (นางสาวรวี ปาฟอง)

Date 16/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 16/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 23 (Code MF8)

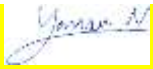
I, นางสาวพริสร ศรีอุดมเดชสกุล **age 20.7 years old, HN 6343863** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.

- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

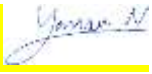
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 23** (นางสาวพริสร ศรีอุดมเดชสกุล)

Date 23/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 23/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 24 (Code MF9)

I, นางสาวรัชชา ทรัพย์ยิ่งวัฒนา **age 20.9 years old, HN 6305287** Village No. ……

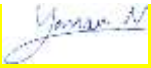
Subdistrict…….. District…….. Province……..

read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

I have read all the information and am willing to participate in the clinical research study.

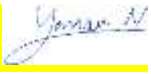
Signature  On behalf of **Participant 24** (นางสาวรัชชา ทรัพย์ยิ่งวัฒนา)

Date 23/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that

will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 23/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 25 (Code MF10)

I, นายภูวนาท ฉิมสน **age 20.3 years old, HN 6400108** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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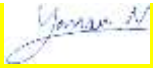
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.

- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

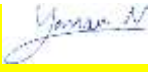
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 25** (นายภูวนาท ฉิมสน)

Date 23/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 23/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 26 (Code MF11)

I, นางสาวสิชาพัชร์ ภูมิสุข **age 22.6 years old, HN 6400610** Village No. …….. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

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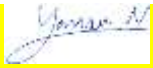
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

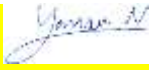
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 26** (นางสาวสิชาพัชร์ ภูมิสุข)

Date 30/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 30/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

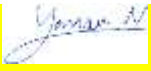
Participant 27 (Code MF12)

I, นายพงษ์พันธ์ สอนลี **age 22.9 years old, HN 6402157** Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

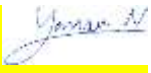
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 27** (นายพงษ์พันธ์ สอนลี)

Date 30/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 30/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Participant 28 (Code MF13)

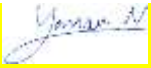
I, นายนพเก้า จุไรรัตน์พร age 18.3 years old, HN 6306024 Village No. ……. Subdistrict…….. District…….. Province…….. read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research. The duration of the research, research methods, dangers or symptoms that may arise from the research. or from the medicine used Including the benefits that will arise from the research. and guidelines for treatment by other methods in detail. I have had enough time and opportunity to ask questions until I have a good understanding. The researcher answered various questions willingly and without concealment until I was satisfied.

- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. This must be done for the purpose of verifying the accuracy of the information only. By agreeing to participate in this study, I am giving consent to have my medical history reviewed. I understand that I have the right to inspect or correct my personal data and can revoke my authorization to use my personal data. This must be informed to the researcher.
- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information for academic purposes. Including future use of medical information or pharmaceutical research only.
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial

Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

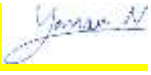
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 28** (นายนพเก้า จุไรรัตน์พร)

Date 30/09/2016

(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

I have explained the purpose of the research, the research methods, dangers or adverse reactions or risks that may arise from the research. or from the medicine used Including the benefits that will arise from thorough research. Let the participants in the research project named above know and have a good understanding. Ready to sign the consent document willingly.

Signature: 

Date 30/09/2016

Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

Research protocol: part 2

Budget: Total 85,500 Thai baht

No.	Items	Cost
1	Gauze sheet, cotton, antiseptic	12,000
2	Disposable dental care equipment	15,000
3	Needles and syringes	13,500
4	Bupivacaine and lidocaine	25,000
5	Epinephrine	12,000
6	Sterile normal saline solution	8,000
	Total	85,500

Other support for the project: Residency Training Program in Oral and Maxillofacial Surgery, Faculty of Dentistry, Chiang Mai University supported disposable small equipment and consumable reagents

Collaboration with other scientists or research institutions: No

Links to other projects: No

Curriculum Vitae of investigators: We have now provided the CV of all the investigators.

Other research activities of the investigators: All research projects have been finished.

Financing and insurance: No