

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 1.5-2 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. Smear 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 wound 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.

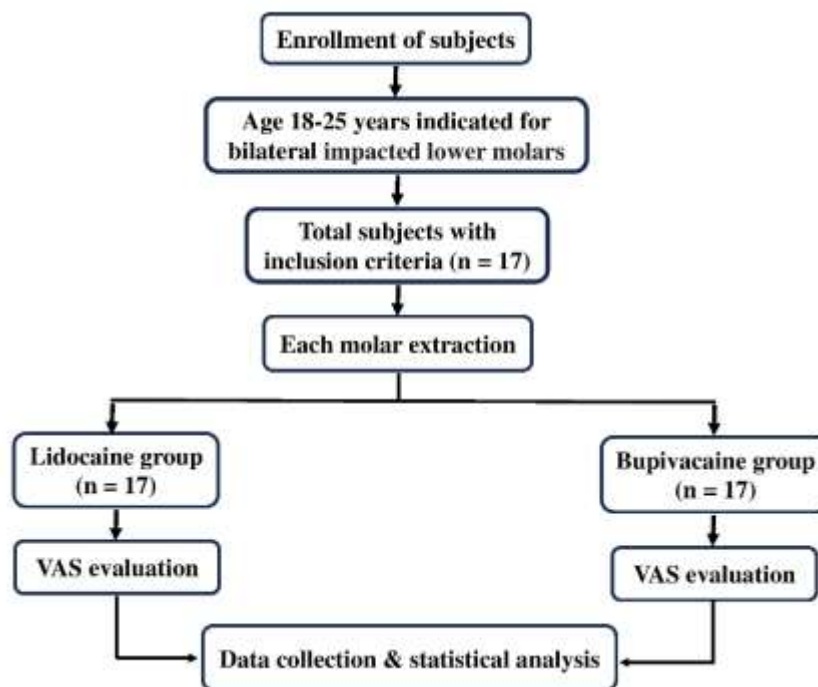


FIGURE 1: CONSORT flow diagram of the study design. CONSORT = consolidated standards of the reporting trial.

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.
3. Garland EL: **Pain processing in the human nervous system: a selective review of nociceptive and biobehavioral pathways.** *Prim Care* 2012, **39**(3):561-571.
4. Fillingim RB: **Individual differences in pain: understanding the mosaic that makes pain personal.** *Pain* 2017, **158** Suppl 1(Suppl 1):S11-S18.
5. Monteiro J, Tanday A, Ashley PF, Parekh S, Alamri H: **Interventions for increasing acceptance of local anaesthetic in children and adolescents having dental treatment.** *Cochrane Database Syst Rev* 2020, **2**(2):CD011024.
6. Becker DE, Reed KL: **Local anesthetics: review of pharmacological considerations.** *Anesth Prog* 2012, **59**(2):90-101; quiz 102-103.
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

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

214 **Dissemination of results and publication policy**

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

219 **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											

220 **Problems anticipated**

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

224 **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

225 **Ethics**

226 Ethical approval for this project was granted by the Human Experimentation Committee of the
 227 Faculty of Dentistry, Chiang Mai University, Chiang Mai, Thailand (**Certificate Number:**
 228 **52/2014 (52/2557 for Thai version), Date: 3rd December 2014 and Certificate Number:**
 229 **42/2016, Date: 24th August 2016**). All patients were fully informed about the particulars of the
 230 study and willingly provided their signatures on the consent forms before any study procedures
 231 were performed. This study followed the guidelines of the Helsinki Declaration 2008: Ethical
 232 Principles for Medical Research Involving Human Subjects. Subjects' rights have been protected
 233 by an appropriate institutional review board and written informed consent was granted by all
 234 subjects.

235 **Informed Consent Form (ICF)**

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

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

241 **Principal Investigator**

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

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

245 Telephone: +66 53 944454

246 Email: vuttinunch@yahoo.co.th

247 Signature



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

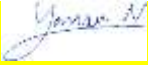
249 Date 05 Jan 2015

Participant 1 (Code MF14)

I, น.ส. วัณวิสา หายโสทรก 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.

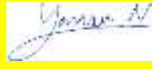
- I am informed by the researcher that if there is any danger from such research. I will receive medical treatment free of charge.
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will 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** (วัณวิสา หายโสทรก)

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. ฐิธิญา กาพพรรณเล็ก 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.

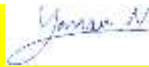
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Signature



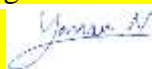
On behalf of **Participant 2** (น.ส. ฐวิษฐา ภาพพรรณล็ก)

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 เรืองกุล age 20.4 years old, HN: 6512855 Village No. Subdistrict..... District..... Province.....

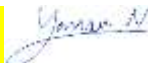
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I have read all the information and am willing to participate in the clinical research study.

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

Date 05 Jan 2015
(Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

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Signature: 

Date 05 Jan 2015

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

Participant 4 (Code MF17)

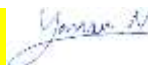
I, นาย ชนโชติ ลิธิจำรัสกุล age 24.6 years old, HN: 6704920 Village No.
Subdistrict..... District..... Province.....
read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

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 สิริจรรย์สกุล)

(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. อรพลิษฐ์ 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).

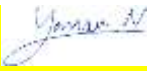
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 5** (น.ส. อรพินทร 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. ระลึพรรณ กาฬากทอง 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.

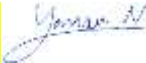
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. 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 6** (น.ส. ระลึพรรณ กาฬาทอง)

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. วณิชชา 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.

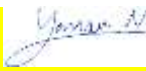
I have received a copy of the consent to participate in the research project that I signed and dated, along with a document explaining information for research participants. This is before signing the consent form to conduct this research. I was explained by the researcher about the purpose of the research.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

- 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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- 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



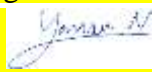
On behalf of **Participant 7** (น.ส. วนิษา ยาสะ)

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 สหรัฏฐ์ 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.

- 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.

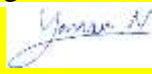
Signature  On behalf of **Participant 8** (นาย สหรัฏฐ์ อิวชาวนา)

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).

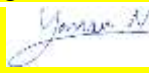
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 9** (นาย เกริกกรรัชย์ 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 วรรณทร age 23.6 years old, **HN 6509153** Village No. Subdistrict..... District..... Province.....

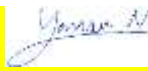
read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

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.
- 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).

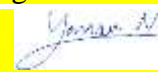
I have read all the information and am willing to participate in the clinical research study.

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

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.

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

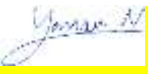
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- 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.

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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 11** (น.ส. กัญยรัตน์ 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. ยพารัตน์ 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.

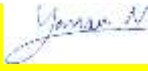
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- I am aware that the research information includes my medical information which is anonymous. It will go through various processes such as collecting data. Recording information in records and on computers, examining, analyzing, and reporting information 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



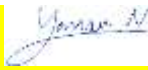
On behalf of **Participant 12** (น.ส. ยุพารัตน์ อุดแสน)

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)

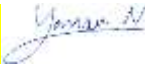
I, นายชวรงค์ เทศกาญจนารักษ์ age 20.7 years old, HN 6604757 Village No.
Subdistrict..... District..... Province.....
read the details from the attached information sheet for research project participants. and I agree to voluntarily participate in the said research project.

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).

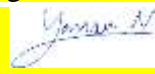
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 13** (น.ส. ธชววรรณ เทศกาญจน์รักษ์)

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

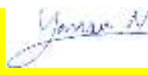
Participant 14 (Code MF1)

I, นายณัฐดนัย หิรัญแก้ว 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 สิริแก้ว)

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 อนุตาลนันท 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.

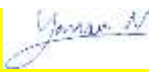
- The researcher guarantees that my personal information will be kept secret. and will be disclosed only with my consent. Other persons on behalf of the research sponsoring company Human Research Ethics Committee. The Food and Drug Administration may be permitted to inspect and process my information. 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

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

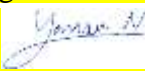
940 I have read all the information and am willing to participate in the clinical research study.

941 Signature  On behalf of **Participant 15** (นายคชวิษฐ์ อนุศาสนนันท์)

942 Date 15 Jan 2015

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

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

948 Signature: 

949 Date 15 Jan 2015

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

951

952 **Participant 16 (Code MF27)**

953 I, นาย คุณานนท์ สายวงศ์อินทร์ age 19.8 years old, HN 6500101 Village No.

954 Subdistrict..... District..... Province.....

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

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

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

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

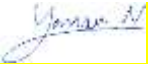
970 - The researcher guarantees that my personal information will be kept secret. and will be
971 disclosed only with my consent. Other persons on behalf of the research sponsoring
972 company Human Research Ethics Committee. The Food and Drug Administration may be

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.

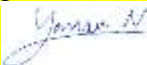
- If I have any questions about the research process. I can contact Dr. Sansanee Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during official hours).

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

Signature  On behalf of **Participant 16** (นาย คุณานนต์ สายวงศ์อินทร์)

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 ยศุภเวท 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.

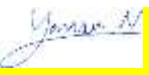
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- 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).

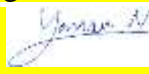
I have read all the information and am willing to participate in the clinical research study.

Signature  On behalf of **Participant 17** (นาย ยศุภรเวท 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

1045

1046 **Participant 18 (Code MF3)**

1047 **I, นายธนพร แหททรัพย์ age 22.6 years old, HN 6304676** Village No.

1048 Subdistrict..... District..... Province.....

1049 read the details from the attached information sheet for research project participants. and I agree
1050 to voluntarily participate in the said research project.

1051 I have received a copy of the consent to participate in the research project that I signed and dated,
1052 along with a document explaining information for research participants. This is before signing the
1053 consent form to conduct this research. I was explained by the researcher about the purpose of the
1054 research. The duration of the research, research methods, dangers or symptoms that may arise from
1055 the research. or from the medicine used Including the benefits that will arise from the research.
1056 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1057 to ask questions until I have a good understanding. The researcher answered various questions
1058 willingly and without concealment until I was satisfied.

1059 - I am informed by the researcher that if there is any danger from such research. I will receive
1060 medical treatment free of charge.

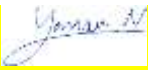
1061 - I have the right to terminate my participation in the research project at any time. You must
1062 notify the reason. and termination of participation in this research It will not affect
1063 treatment or other rights that I will continue to receive.

1064 - The researcher guarantees that my personal information will be kept secret. and will be
1065 disclosed only with my consent. Other persons on behalf of the research sponsoring
1066 company Human Research Ethics Committee. The Food and Drug Administration may be
1067 permitted to inspect and process my information. This must be done for the purpose of
1068 verifying the accuracy of the information only. By agreeing to participate in this study, I
1069 am giving consent to have my medical history reviewed. I understand that I have the right
1070 to inspect or correct my personal data and can revoke my authorization to use my personal
1071 data. This must be informed to the researcher.

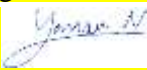
1072 - I am aware that the research information includes my medical information which is
1073 anonymous. It will go through various processes such as collecting data. Recording
1074 information in records and on computers, examining, analyzing, and reporting information
1075 for academic purposes. Including future use of medical information or pharmaceutical
1076 research only.

1077 - If I have any questions about the research process. I can contact Dr. Sansanee
1078 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
1079 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
1080 official hours).

1081 I have read all the information and am willing to participate in the clinical research study.

1082 Signature  On behalf of **Participant 18 (นายธนพร แหททรัพย์)**

1083 Date 15 Jan 2015
1084 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com
1085 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1086 or risks that may arise from the research. or from the medicine used Including the benefits that
1087 will arise from thorough research. Let the participants in the research project named above know
1088 and have a good understanding. Ready to sign the consent document willingly.

1089 Signature: 

1090 Date 15 Jan 2015

1091 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1092

1093 **Participant 19 (Code MF4)**

1094 I, น.ส. ปรรณมา เกษณา age 20.8 years old, HN 6304676 Village No.

1095 Subdistrict..... District..... Province.....

1096 read the details from the attached information sheet for research project participants. and I agree
1097 to voluntarily participate in the said research project.

1098 I have received a copy of the consent to participate in the research project that I signed and dated,
1099 along with a document explaining information for research participants. This is before signing the
1100 consent form to conduct this research. I was explained by the researcher about the purpose of the
1101 research. The duration of the research, research methods, dangers or symptoms that may arise from
1102 the research. or from the medicine used Including the benefits that will arise from the research.
1103 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1104 to ask questions until I have a good understanding. The researcher answered various questions
1105 willingly and without concealment until I was satisfied.

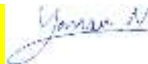
1106 - I am informed by the researcher that if there is any danger from such research. I will receive
1107 medical treatment free of charge.

1108 - I have the right to terminate my participation in the research project at any time. You must
1109 notify the reason. and termination of participation in this research It will not affect
1110 treatment or other rights that I will continue to receive.

1111 - The researcher guarantees that my personal information will be kept secret. and will be
1112 disclosed only with my consent. Other persons on behalf of the research sponsoring
1113 company Human Research Ethics Committee. The Food and Drug Administration may be
1114 permitted to inspect and process my information. This must be done for the purpose of
1115 verifying the accuracy of the information only. By agreeing to participate in this study, I
1116 am giving consent to have my medical history reviewed. I understand that I have the right
1117 to inspect or correct my personal data and can revoke my authorization to use my personal
1118 data. This must be informed to the researcher.

- 1119 - I am aware that the research information includes my medical information which is
1120 anonymous. It will go through various processes such as collecting data. Recording
1121 information in records and on computers, examining, analyzing, and reporting information
1122 for academic purposes. Including future use of medical information or pharmaceutical
1123 research only.
- 1124 - If I have any questions about the research process. I can contact Dr. Sansanee
1125 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
1126 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
1127 official hours).

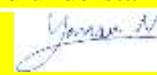
1128 I have read all the information and am willing to participate in the clinical research study.

1129 Signature  On behalf of **Participant 19** (น.ส. ปารรณนา เกษณดา)

1130 Date 15 Jan 2015

1131 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1132 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1133 or risks that may arise from the research. or from the medicine used Including the benefits that will
1134 arise from thorough research. Let the participants in the research project named above know and
1135 have a good understanding. Ready to sign the consent document willingly.

1136 Signature: 

1137 Date 15 Jan 2015

1138 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1139

1140 **Participant 20 (Code MF5)**

1141 I, ชัย วิฑูรย์ ใจอ่อน อายุ age 25 years old, HN 6304801 Village No.


1142 Subdistrict..... District..... Province.....

1143 read the details from the attached information sheet for research project participants. and I agree
1144 to voluntarily participate in the said research project.

1145 I have received a copy of the consent to participate in the research project that I signed and dated,
1146 along with a document explaining information for research participants. This is before signing the
1147 consent form to conduct this research. I was explained by the researcher about the purpose of the
1148 research. The duration of the research, research methods, dangers or symptoms that may arise from
1149 the research. or from the medicine used Including the benefits that will arise from the research.
1150 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1151 to ask questions until I have a good understanding. The researcher answered various questions
1152 willingly and without concealment until I was satisfied.

- 1153 - I am informed by the researcher that if there is any danger from such research. I will receive
 1154 medical treatment free of charge.
- 1155 - I have the right to terminate my participation in the research project at any time. You must
 1156 notify the reason. and termination of participation in this research It will not affect
 1157 treatment or other rights that I will continue to receive.
- 1158 - The researcher guarantees that my personal information will be kept secret. and will be
 1159 disclosed only with my consent. Other persons on behalf of the research sponsoring
 1160 company Human Research Ethics Committee. The Food and Drug Administration may be
 1161 permitted to inspect and process my information. This must be done for the purpose of
 1162 verifying the accuracy of the information only. By agreeing to participate in this study, I
 1163 am giving consent to have my medical history reviewed. I understand that I have the right
 1164 to inspect or correct my personal data and can revoke my authorization to use my personal
 1165 data. This must be informed to the researcher.
- 1166 - I am aware that the research information includes my medical information which is
 1167 anonymous. It will go through various processes such as collecting data. Recording
 1168 information in records and on computers, examining, analyzing, and reporting information
 1169 for academic purposes. Including future use of medical information or pharmaceutical
 1170 research only.
- 1171 - If I have any questions about the research process. I can contact Dr. Sansanee
 1172 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
 1173 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
 1174 official hours).

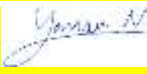
1175 I have read all the information and am willing to participate in the clinical research study.

1176 Signature  On behalf of **Participant 20** (ธัญวิฑูร เชื้อนสกุล)

1177 Date 15 Jan 2015

1178 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1179 I have explained the purpose of the research, the research methods, dangers or adverse reactions
 1180 or risks that may arise from the research. or from the medicine used Including the benefits that will
 1181 arise from thorough research. Let the participants in the research project named above know and
 1182 have a good understanding. Ready to sign the consent document willingly.

1183 Signature: 

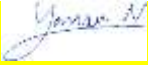
1184 Date 15 Jan 2015

1185 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1186

1187 **Participant 21 (Code MF6)**

1188 I, นางสาวสุพัตรา กรรณ age 20.8 years old, HN 6304793 Village No.
 1189 Subdistrict..... District..... Province.....
 1190 read the details from the attached information sheet for research project participants. and I agree
 1191 to voluntarily participate in the said research project.
 1192 I have received a copy of the consent to participate in the research project that I signed and dated,
 1193 along with a document explaining information for research participants. This is before signing the
 1194 consent form to conduct this research. I was explained by the researcher about the purpose of the
 1195 research. The duration of the research, research methods, dangers or symptoms that may arise from
 1196 the research. or from the medicine used Including the benefits that will arise from the research.
 1197 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
 1198 to ask questions until I have a good understanding. The researcher answered various questions
 1199 willingly and without concealment until I was satisfied.
 1200 - I am informed by the researcher that if there is any danger from such research. I will receive
 1201 medical treatment free of charge.
 1202 - I have the right to terminate my participation in the research project at any time. You must
 1203 notify the reason. and termination of participation in this research It will not affect
 1204 treatment or other rights that I will continue to receive.
 1205 - The researcher guarantees that my personal information will be kept secret. and will be
 1206 disclosed only with my consent. Other persons on behalf of the research sponsoring
 1207 company Human Research Ethics Committee. The Food and Drug Administration may be
 1208 permitted to inspect and process my information. This must be done for the purpose of
 1209 verifying the accuracy of the information only. By agreeing to participate in this study, I
 1210 am giving consent to have my medical history reviewed. I understand that I have the right
 1211 to inspect or correct my personal data and can revoke my authorization to use my personal
 1212 data. This must be informed to the researcher.
 1213 - I am aware that the research information includes my medical information which is
 1214 anonymous. It will go through various processes such as collecting data. Recording
 1215 information in records and on computers, examining, analyzing, and reporting information
 1216 for academic purposes. Including future use of medical information or pharmaceutical
 1217 research only.
 1218 - If I have any questions about the research process. I can contact Dr. Sansanee
 1219 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
 1220 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
 1221 official hours).
 1222 I have read all the information and am willing to participate in the clinical research study.

1223 Signature  On behalf of **Participant 21** (นางสาวสุพัตรา กรรณ)

1224 Date 09/09/2016

1225 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com
1226 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1227 or risks that may arise from the research. or from the medicine used Including the benefits that
1228 will arise from thorough research. Let the participants in the research project named above know
1229 and have a good understanding. Ready to sign the consent document willingly.

1230 Signature: 

1231 Date 09/09/2016

1232 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1233

1234 **Participant 22 (Code MF7)**

1235 I, นางสาววี ปาฟอง age 20.9 years old, HN 6200038 Village No.

1236 Subdistrict..... District..... Province.....

1237 read the details from the attached information sheet for research project participants. and I agree
1238 to voluntarily participate in the said research project.

1239 I have received a copy of the consent to participate in the research project that I signed and dated,
1240 along with a document explaining information for research participants. This is before signing the
1241 consent form to conduct this research. I was explained by the researcher about the purpose of the
1242 research. The duration of the research, research methods, dangers or symptoms that may arise from
1243 the research. or from the medicine used Including the benefits that will arise from the research.
1244 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1245 to ask questions until I have a good understanding. The researcher answered various questions
1246 willingly and without concealment until I was satisfied.

1247 - I am informed by the researcher that if there is any danger from such research. I will receive
1248 medical treatment free of charge.

1249 - I have the right to terminate my participation in the research project at any time. You must
1250 notify the reason. and termination of participation in this research It will not affect
1251 treatment or other rights that I will continue to receive.

1252 - The researcher guarantees that my personal information will be kept secret. and will be
1253 disclosed only with my consent. Other persons on behalf of the research sponsoring
1254 company Human Research Ethics Committee. The Food and Drug Administration may be
1255 permitted to inspect and process my information. This must be done for the purpose of
1256 verifying the accuracy of the information only. By agreeing to participate in this study, I
1257 am giving consent to have my medical history reviewed. I understand that I have the right
1258 to inspect or correct my personal data and can revoke my authorization to use my personal
1259 data. This must be informed to the researcher.

1260 - I am aware that the research information includes my medical information which is
1261 anonymous. It will go through various processes such as collecting data. Recording
1262 information in records and on computers, examining, analyzing, and reporting information

1263 for academic purposes. Including future use of medical information or pharmaceutical
1264 research only.

1265 - If I have any questions about the research process. I can contact Dr. Sansanee
1266 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
1267 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
1268 official hours).

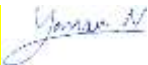
1269 I have read all the information and am willing to participate in the clinical research study.

1270 Signature  On behalf of **Participant 22** (นางสาววี ปาฟอง)

1271 Date 16/09/2016

1272 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1273 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1274 or risks that may arise from the research. or from the medicine used Including the benefits that
1275 will arise from thorough research. Let the participants in the research project named above know
1276 and have a good understanding. Ready to sign the consent document willingly.

1277 Signature: 

1278 Date 16/09/2016

1279 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1280

1281 **Participant 23 (Code MF8)**

1282 I, นางสาวพรสิริ ศรีอุดมเดชสกุล age 20.7 years old, HN 6343863 Village No.
1283 Subdistrict..... District..... Province.....

1284 read the details from the attached information sheet for research project participants. and I agree
1285 to voluntarily participate in the said research project.

1286 I have received a copy of the consent to participate in the research project that I signed and dated,
1287 along with a document explaining information for research participants. This is before signing the
1288 consent form to conduct this research. I was explained by the researcher about the purpose of the
1289 research. The duration of the research, research methods, dangers or symptoms that may arise from
1290 the research. or from the medicine used Including the benefits that will arise from the research.
1291 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1292 to ask questions until I have a good understanding. The researcher answered various questions
1293 willingly and without concealment until I was satisfied.

1294 - I am informed by the researcher that if there is any danger from such research. I will receive
1295 medical treatment free of charge.

- 1296 - I have the right to terminate my participation in the research project at any time. You must
 1297 notify the reason, and termination of participation in this research It will not affect
 1298 treatment or other rights that I will continue to receive.
- 1299 - The researcher guarantees that my personal information will be kept secret, and will be
 1300 disclosed only with my consent. Other persons on behalf of the research sponsoring
 1301 company Human Research Ethics Committee. The Food and Drug Administration may be
 1302 permitted to inspect and process my information. This must be done for the purpose of
 1303 verifying the accuracy of the information only. By agreeing to participate in this study, I
 1304 am giving consent to have my medical history reviewed. I understand that I have the right
 1305 to inspect or correct my personal data and can revoke my authorization to use my personal
 1306 data. This must be informed to the researcher.
- 1307 - I am aware that the research information includes my medical information which is
 1308 anonymous. It will go through various processes such as collecting data. Recording
 1309 information in records and on computers, examining, analyzing, and reporting information
 1310 for academic purposes. Including future use of medical information or pharmaceutical
 1311 research only.
- 1312 - If I have any questions about the research process. I can contact Dr. Sansanee
 1313 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
 1314 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
 1315 official hours).

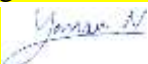
1316 I have read all the information and am willing to participate in the clinical research study.

1317 Signature  On behalf of **Participant 23** (นางสาวพรวิสร ศรีอุดมเดชสกุล)

1318 Date 23/09/2016

1319 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1320 I have explained the purpose of the research, the research methods, dangers or adverse reactions
 1321 or risks that may arise from the research, or from the medicine used Including the benefits that
 1322 will arise from thorough research. Let the participants in the research project named above know
 1323 and have a good understanding. Ready to sign the consent document willingly.

1324 Signature: 

1325 Date 23/09/2016

1326 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1327

1328 **Participant 24 (Code MF9)**

1329 I, นางสาวรัชชา ทรัพย์ยิ่งวัฒนา age 20.9 years old, HN 6305287 Village No.

1330 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.

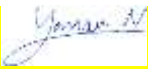
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- 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).

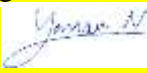
I have read all the information and am willing to participate in the clinical research study.

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

1369 will arise from thorough research. Let the participants in the research project named above know
1370 and have a good understanding. Ready to sign the consent document willingly.

1371 Signature: 

1372 Date 23/09/2016

1373 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1374

1375 **Participant 25 (Code MF10)**

1376 I, นายภูวนาท จิมสน age 20.3 years old, HN 6400108 Village No.

1377 Subdistrict..... District..... Province.....

1378 read the details from the attached information sheet for research project participants. and I agree
1379 to voluntarily participate in the said research project.

1380 I have received a copy of the consent to participate in the research project that I signed and dated,
1381 along with a document explaining information for research participants. This is before signing the
1382 consent form to conduct this research. I was explained by the researcher about the purpose of the
1383 research. The duration of the research, research methods, dangers or symptoms that may arise from
1384 the research. or from the medicine used Including the benefits that will arise from the research.
1385 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1386 to ask questions until I have a good understanding. The researcher answered various questions
1387 willingly and without concealment until I was satisfied.

1388 - I am informed by the researcher that if there is any danger from such research. I will receive
1389 medical treatment free of charge.


1390 - I have the right to terminate my participation in the research project at any time. You must
1391 notify the reason. and termination of participation in this research It will not affect
1392 treatment or other rights that I will continue to receive.

1393 - The researcher guarantees that my personal information will be kept secret. and will be
1394 disclosed only with my consent. Other persons on behalf of the research sponsoring
1395 company Human Research Ethics Committee. The Food and Drug Administration may be
1396 permitted to inspect and process my information. This must be done for the purpose of
1397 verifying the accuracy of the information only. By agreeing to participate in this study, I
1398 am giving consent to have my medical history reviewed. I understand that I have the right
1399 to inspect or correct my personal data and can revoke my authorization to use my personal
1400 data. This must be informed to the researcher.

1401 - I am aware that the research information includes my medical information which is
1402 anonymous. It will go through various processes such as collecting data. Recording
1403 information in records and on computers, examining, analyzing, and reporting information
1404 for academic purposes. Including future use of medical information or pharmaceutical
1405 research only.

1406 - If I have any questions about the research process. I can contact Dr. Sansanee
1407 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
1408 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
1409 official hours).

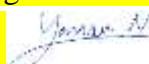
1410 I have read all the information and am willing to participate in the clinical research study.

1411 Signature  On behalf of **Participant 25** (นายภูวนาท จิมสน)

1412 Date 23/09/2016

1413 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1414 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1415 or risks that may arise from the research. or from the medicine used Including the benefits that
1416 will arise from thorough research. Let the participants in the research project named above know
1417 and have a good understanding. Ready to sign the consent document willingly.

1418 Signature: 

1419 Date 23/09/2016

1420 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1421

1422 **Participant 26 (Code MF11)**

1423 I, นางสาวธิชาพัชร ภูมิสุข age 22.6 years old, HN 6400610 Village No.

1424 Subdistrict..... District..... Province.....

1425 read the details from the attached information sheet for research project participants. and I agree
1426 to voluntarily participate in the said research project.

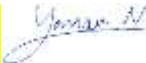
1427 I have received a copy of the consent to participate in the research project that I signed and dated,
1428 along with a document explaining information for research participants. This is before signing the
1429 consent form to conduct this research. I was explained by the researcher about the purpose of the
1430 research. The duration of the research, research methods, dangers or symptoms that may arise from
1431 the research. or from the medicine used Including the benefits that will arise from the research.
1432 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1433 to ask questions until I have a good understanding. The researcher answered various questions
1434 willingly and without concealment until I was satisfied.

1435 - I am informed by the researcher that if there is any danger from such research. I will receive
1436 medical treatment free of charge.

1437 - I have the right to terminate my participation in the research project at any time. You must
1438 notify the reason. and termination of participation in this research It will not affect
1439 treatment or other rights that I will continue to receive.

- 1440 - The researcher guarantees that my personal information will be kept secret, and will be
 1441 disclosed only with my consent. Other persons on behalf of the research sponsoring
 1442 company Human Research Ethics Committee. The Food and Drug Administration may be
 1443 permitted to inspect and process my information. This must be done for the purpose of
 1444 verifying the accuracy of the information only. By agreeing to participate in this study, I
 1445 am giving consent to have my medical history reviewed. I understand that I have the right
 1446 to inspect or correct my personal data and can revoke my authorization to use my personal
 1447 data. This must be informed to the researcher.
- 1448 - I am aware that the research information includes my medical information which is
 1449 anonymous. It will go through various processes such as collecting data. Recording
 1450 information in records and on computers, examining, analyzing, and reporting information
 1451 for academic purposes. Including future use of medical information or pharmaceutical
 1452 research only.
- 1453 - If I have any questions about the research process. I can contact Dr. Sansanee
 1454 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial
 1455 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
 1456 official hours).

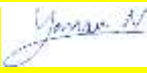
1457 I have read all the information and am willing to participate in the clinical research study.

1458 Signature  On behalf of **Participant 26** (นางสาวลิษาพัชร ภูมิสุข)

1459 Date 30/09/2016

1460 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1461 I have explained the purpose of the research, the research methods, dangers or adverse reactions
 1462 or risks that may arise from the research. or from the medicine used Including the benefits that will
 1463 arise from thorough research. Let the participants in the research project named above know and
 1464 have a good understanding. Ready to sign the consent document willingly.

1465 Signature: 

1466 Date 30/09/2016

1467 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1468

1469 **Participant 27 (Code MF12)**

1470 I, นายพงษ์พันธ์ สอนลี age 22.9 years old, HN 6402157 Village No.
 1471 Subdistrict..... District..... Province.....
 1472 read the details from the attached information sheet for research project participants. and I agree
 1473 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.

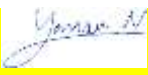
- I have the right to terminate my participation in the research project at any time. You must notify the reason. and termination of participation in this research It will not affect treatment or other rights that I will continue to receive.

- 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).

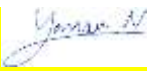
I have read all the information and am willing to participate in the clinical research study.

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.

1512 Signature: 

1513 Date 30/09/2016

1514 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1515

1516 **Participant 28 (Code MF13)**

1517 I, นายณพเก้า จุฬารัตน์พร age 18.3 years old, HN 6306024 Village No.

1518 Subdistrict..... District..... Province.....

1519 read the details from the attached information sheet for research project participants. and I agree
1520 to voluntarily participate in the said research project.

1521 I have received a copy of the consent to participate in the research project that I signed and dated,
1522 along with a document explaining information for research participants. This is before signing the
1523 consent form to conduct this research. I was explained by the researcher about the purpose of the
1524 research. The duration of the research, research methods, dangers or symptoms that may arise from
1525 the research. or from the medicine used Including the benefits that will arise from the research.
1526 and guidelines for treatment by other methods in detail. I have had enough time and opportunity
1527 to ask questions until I have a good understanding. The researcher answered various questions
1528 willingly and without concealment until I was satisfied.

1529 - I am informed by the researcher that if there is any danger from such research. I will receive
1530 medical treatment free of charge.

1531 - I have the right to terminate my participation in the research project at any time. You must
1532 notify the reason. and termination of participation in this research It will not affect
1533 treatment or other rights that I will continue to receive.

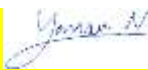
1534 - The researcher guarantees that my personal information will be kept secret. and will be
1535 disclosed only with my consent. Other persons on behalf of the research sponsoring
1536 company Human Research Ethics Committee. The Food and Drug Administration may be
1537 permitted to inspect and process my information. This must be done for the purpose of
1538 verifying the accuracy of the information only. By agreeing to participate in this study, I
1539 am giving consent to have my medical history reviewed. I understand that I have the right
1540 to inspect or correct my personal data and can revoke my authorization to use my personal
1541 data. This must be informed to the researcher.

1542 - I am aware that the research information includes my medical information which is
1543 anonymous. It will go through various processes such as collecting data. Recording
1544 information in records and on computers, examining, analyzing, and reporting information
1545 for academic purposes. Including future use of medical information or pharmaceutical
1546 research only.

1547 - If I have any questions about the research process. I can contact Dr. Sansanee
1548 Neelawattanasuk, telephone number 085-000-9468, Department of Oral and Maxillofacial

1549 Surgery, Faculty of Dentistry Chiang Mai University, telephone 053-944456 (during
1550 official hours).

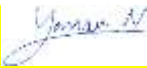
1551 I have read all the information and am willing to participate in the clinical research study.

1552 Signature  On behalf of **Participant 28** (นายณพเก้า จูไรรัตน์พร)

1553 Date 30/09/2016

1554 (Dr. Yanisa Naruenartwongsakul, D.D.S), Email: fai.fai.yanisa@gmail.com

1555 I have explained the purpose of the research, the research methods, dangers or adverse reactions
1556 or risks that may arise from the research. or from the medicine used Including the benefits that
1557 will arise from thorough research. Let the participants in the research project named above know
1558 and have a good understanding. Ready to sign the consent document willingly.

1559 Signature: 

1560 Date 30/09/2016

1561 Researcher: Dr. Yanisa Naruenartwongsakul, D.D.S., Email: fai.fai.yanisa@gmail.com

1562 **Research protocol: part 2**

1563 **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

1564 **Other support for the project:** Residency Training Program in Oral and Maxillofacial Surgery,
1565 Faculty of Dentistry, Chiang Mai University supported disposable small equipment and
1566 consumable reagents

1567 **Collaboration with other scientists or research institutions:** No

1568 **Links to other projects:** No

1569 **Curriculum Vitae of investigators:** We have now provided the CV of all the investigators.

1570 **Other research activities of the investigators:** All research projects have been finished.

1571 **Financing and insurance:** No