Effects and application values of AI portrait feature recognition in difficult airway prediction

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Informed consent

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Description of the study and writtern informed consent

1. Invitation.

This is a clinical study investigating "Effects and application values of AI portrait feature recognition in difficult airway prediction",The study is performed in Shanghai Ninth People's Hospital Affiliated with Shanghai Jiao Tong University School of Medicine.The proposal has been proved by the Hospital Ethic Committee. We are expected to enroll 4000 participants.

Before you decide to participate in the study,please read the following description carefully which will help you to understand the purpose and contents of the study,to understand the potential benefits from the study, as well as the potential risks that you may encounter during the study. You may discuss your concerns with your doctors, relatives and/or friends freely before making the decision. If you have any questions or would like to get more information about the study,please don't hesitate to contacting us.

2. Purpose of the study.

Difficult airways are the most important cause of death and

disability related to anesthesia,Currently, the international assessment of difficult airway relies on a variety of assessment scales and auxiliary CT, MRI, US examination, but there are many limitations and shortcomings, such as low accuracy, cumbersome procedures, radiation, etc.Thus,they are not the best way to predict.However,The unique morphological features of the human face may be the key that opens the door to difficult airways.In this study,we would like to use AI technology to identify subjects' portrait information and evaluate the correlation between subjects' portrait information and the occurrence of difficult airways.Possible diagnostic indicators were constructed to evaluate the effect and application value of AI portrait feature recognition in difficult airway prediction.

3. Obligation.

You are entirely NOT obligated to participate in this study. You have the full right to participate or to decline the participation. Moreover, you have the full right to withdraw your written informed consent at any time during the process. Withdrawal from the study will NOT affect clinical procedures or impair the benefit you will have from the study. In such case, your data and information will NOT be used in the study.

4. Duties .

1)We will make an overall assessment for the eligibility. If you agree to participate in this study, you must sign a written informed consent, you will be asked to participate to the research voluntarily and sign the written informed consent. Whether you are willing or not to participate in this study,we will give you an anesthesia as planned.

2) If you participant in the study, We will use a 3D face scanner to capture your 3D portrait photos before anesthesia.

3)Please tell us if there is anything interfere you from accepting above portrait information collection.

5. Costs .

There is NO any extra cost for participating this study.

6. Benefits.

You will know that you are at risk of having a difficult airway.

7. Potential risk.

Our study did NOT involve any intervention during surgery or anesthesia, so there is NO extra risk other than regular clinical procedures, e.g., anesthetic allergy, cardiovascular accident,respiratory accident, neurological complications; radiation ,fever, and infection related to fluid or blood transfusion. Moreover,Your photo information will be entered into the confidential database for storage. Except for the

researchers and members of the ethic committee, no one has the right to transfer the analysis data. We will NOT disclose any of your information by signing the guarantee before reading.

8. Confidentiality.

Your personal information(including CRF, and portrait feature etc.)will be kept fully confidential in the Big Data Research Institute and your personal privacy will be protected according to law.Researchers and ethic committee are the only ones who have the authority to access your study information. Any publicized results will NOT show your identity.

9. More information

If you have any questions about the study, or feel discomfort during the study, or want to obtain more information of the study,please do NOT hesitate to contact the research assistant (contact message listed on next page） .