



**HACETTEPE UNIVERSITY**

**FACULTY OF MEDICINE**

**DEVELOPMENT OF ARTIFICIAL INTELLIGENCE ALGORITHM THAT PREDICTS THE RISK OF  
POST-INDUCTION HYPOTENSION IN CESAREAN SECTION OPERATIONS UNDER SPINAL  
ANESTHESIA**

Dear Participant,

Anesthesia such as "spinal" or "combined spinal-epidural" is commonly applied to pregnant women, causing numbness and loss of sensation from the abdomen downwards for 4-6 hours, which facilitates cesarean delivery. It has been assessed that you are suitable for this type of anesthesia.

We invite you to participate in a study conducted within our university. The name of the study is "Development of an Artificial Intelligence Algorithm to Predict the Risk of Hypotension After Induction in Cesarean Sections with Spinal Anesthesia."

We recommend you to participate in this research. However, we must state that participation is voluntary. Participation in the study is based on voluntariness. Before making your decision, we want to inform you about the research. After reading and understanding this information, if you wish to participate, please sign the form.

The type of anesthesia that will be applied to you frequently encounters the issue of "hypotension." The reason we want to conduct this research is to develop an artificial intelligence algorithm using our data to predict the causes of this hypotension issue. This way, we will be able to detect the problem of "hypotension" after anesthesia in future patients like you much more accurately in advance. Please know that whether you participate in the study or not, there will be no change in the method of your cesarean operation, the drug doses, the application of anesthesia, or the treatment method if your blood pressure drops. Every pregnant woman will be given anesthesia and cesarean in the same way as routinely done. In this study, only the results of the routine blood samples taken from you when you are admitted to the hospital, the nurse observation results made while you are in your room, and the vital function information recorded by anesthesia during the cesarean operation will be evaluated by a computer system that does not know your identity. When you enter the study, part of the routine blood sample taken from you will be used to detect a molecule called Syndecan-1 in your blood. Additionally, measurements such as back length and abdominal circumference, which we will use in our study, will be taken in the operation room.

Your participation in this study, carried out with the joint participation of Hacettepe University Faculty of Medicine, Departments of Anesthesiology and Reanimation, and Medical Biochemistry, and Artvin Çoruh University Faculty of Engineering, Department of Computer Engineering, is important for the success of the research.

No fee will be requested from you to participate in this study. You will not be paid extra for participating in the study.

Your medical information will be kept confidential but may be reviewed by officials, ethics committees, or authorities ensuring the quality of the study if necessary.

You can refuse to participate in this study. Participation in this research is entirely voluntary, and if you refuse, there will be no change in the treatment applied to you. You also have the right to withdraw your consent at any stage of the study.

(Participant/Patient Declaration)

I have been informed by Dr. Banu KILIÇASLAN that a medical research will be conducted with the joint participation of Hacettepe University Faculty of Medicine, Departments of Anesthesiology and Reanimation and I have been given the above information about this research. After receiving this information, I was invited to participate in this research as a "participant."

If I participate in this research, I believe that the confidentiality of my personal information, which should remain between the doctor and me, will be approached with great care and respect during this research. I have been sufficiently assured that my personal information will be carefully protected during the use of the research results for educational and scientific purposes.

I can withdraw from the study at any time without providing any reason. (However, I am aware that it would be appropriate to notify the researchers in advance to avoid putting them in a difficult situation). I can also be excluded from the study by the researcher without causing any harm to my medical condition.

I do not bear any financial responsibility for the expenses related to the research. I will not be paid either.

I have been given the necessary assurance that in the event of any health issue arising from the direct or indirect application of the research, all kinds of medical interventions will be provided. (I will also not bear any financial burden for these medical interventions).

If I encounter a health issue during the research, I know that I can contact Dr. Banu KILIÇASLAN at 0312 305 1250 (work) or 0532 296 92 90 (mobile) or at the address of the Hacettepe University Faculty of Medicine, Department of Anesthesiology and Reanimation at any time.

I am not obliged to participate in this research, and I may choose not to participate. I have not encountered any coercive behavior regarding my participation in the research. I also know that if I refuse to participate, this will not bring any harm to my medical care and the relationship with my doctor.

I have fully understood all the explanations given to me. After a period of independent consideration, I have decided to participate in this research project as a "participant." I gladly and voluntarily accept the invitation to participate.

A copy of this signed form will be given to me.

Participant

Name, surname:

Address:

Phone:

Signature:

Interview witness

Name, surname:

Address:

Phone:

Signature:

Doctor conducting the interview

Name, surname, title:

Address:

Phone:

Signature: