

# Case Report Form

**Effects of intravenous and inhalation anesthesia on blood glucose and complications in patients with type 2 diabetes mellitus**

<b>Subject Initials</b>	_ _      _ _      _ _      _ _																				
<b>Study Center No.</b>	_ _      _ _      _ _      _ _																				
<b>Filter No.</b>	_ _      _ _      _ _      _ _																				
<b>Random No.</b>	_ _      _ _      _ _      _ _																				
<b>Study start date</b>	<table border="1"><tr><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td></tr><tr><td>d</td><td>d</td><td>m</td><td>m</td><td>m</td><td>y</td><td>y</td><td>y</td><td>y</td><td></td></tr></table>	_	_	_	_	_	_	_	_	_	_	d	d	m	m	m	y	y	y	y	
_	_	_	_	_	_	_	_	_	_												
d	d	m	m	m	y	y	y	y													
<b>Study end date</b>	<table border="1"><tr><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td><td> _ </td></tr><tr><td>d</td><td>d</td><td>m</td><td>m</td><td>m</td><td>y</td><td>y</td><td>y</td><td>y</td><td></td></tr></table>	_	_	_	_	_	_	_	_	_	_	d	d	m	m	m	y	y	y	y	
_	_	_	_	_	_	_	_	_	_												
d	d	m	m	m	y	y	y	y													

**Investigator's Signature:** \_\_\_\_\_

**Form Maker: Department of Anesthesiology, West China Hospital,  
Sichuan University**

Randomisation No.: |\_|\_| || |\_|\_| || |\_|\_| || |\_|\_| | Subject initials: |\_|\_| || |\_|\_| || |\_|\_| || |\_|\_| |

**Screening**

**Date:** \_\_\_\_\_

**DD MMM YYYY**

**Inclusion criteria:**

Note: subjects whose one of the following is "No" cannot be included.	No	Yes
1. A confirmed diagnosis of type 2 diabetes mellitus;	<input type="checkbox"/>	<input type="checkbox"/>
2. Male or female 18 to 90 years of age;	<input type="checkbox"/>	<input type="checkbox"/>
3. American Society of Anesthesiologists class I, II, or III;	<input type="checkbox"/>	<input type="checkbox"/>
4. General surgery, operation time more than 2 hours;	<input type="checkbox"/>	<input type="checkbox"/>
5. Correctly understanding Chinese and express their wishes;	<input type="checkbox"/>	<input type="checkbox"/>
6. Provision of written informed consent.		

\*If any inclusion criteria are ticked no then the patient is not eligible for the study.

**Exclusion criteria:**

Note: subjects whose one of the following is "Yes" cannot be included.	No	Yes
1. with a history of severe systemic diseases, metabolic disorders, diabetic ketoacidosis or hyperglycemia, diabetic neuropathy, diabetic nephropathy, hepatorenal dysfunction, and neuromuscular disease;	<input type="checkbox"/>	<input type="checkbox"/>
2. with pancreatic cancer, islet cell tumor;	<input type="checkbox"/>	<input type="checkbox"/>
3. being not suitable for the patients according to the doctors or surgeons;	<input type="checkbox"/>	<input type="checkbox"/>
4. Inability to complete research questionnaires;		
5. rejection of randomization.		

\* If any exclusion criteria are ticked yes then the patient is not eligible for the study.

Fill in the screening number: |\_|\_| || |\_|\_| || |\_|\_| || |\_|\_|

\* Please fill in the screening number on the cover page and each page after that for the sequence number of subjects entering the screening for the center, and continue to fill in.

**Demographic data:**

Date of birth:  _ _      _ _      _ _      _ _      _ _    ( Consistent with the front page of medical record)
Gender: <input type="checkbox"/> male <input type="checkbox"/> female    Nation: <input type="checkbox"/> Chinese <input type="checkbox"/> Other nationalities: _____
ID number:  _ _      _ _      _ _      _ _      _ _      _ _      _ _      _ _      _ _      _ _

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

**DD MMM YYYY**

Randomisation No.: | | | | | | | | | |

Subject initials: | | | | | | | | | |

**Basic information of subject:**

Name: _____	Nursing unit:	Bed No.:
Age (yrs):	Height (m):	BMI (kg/m <sup>2</sup> ):
	Weight (kg):	ASA:
Fasting blood glucose:           mmol/L		Postprandial blood glucose:           mmol/L
Preoperative blood glucose control: <input type="checkbox"/> Diet control <input type="checkbox"/> Insulin control <input type="checkbox"/> Oral antidiabetic control <input type="checkbox"/> Insulin and oral antidiabetic control		
<b>contact information:</b> Subject's phone No.:		
Please confirm that the contact person is the one who can easily contact you (the subject) after discharge. This phone can contact you personally. First contact person: _____ Phone No.:		

**History collection:**

Name of previous disease	Diagnosis time
Name of previous operation	Operation time

**Random grouping table of subjects**

**Whether the relevant departments were approved by the doctors to participate in the study?**

No  Yes

**Random grouping scheme:**  Nondynamic random grouping  Dynamic random grouping

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Randomisation No.: |\_\_||\_\_||\_\_||\_\_|| Subject initials: |\_\_||\_\_||\_\_||\_\_||

**Whether the early information of subjects is completely collected, recorded and entered?**

- No, the subject has not completed the evaluation and will not be given a random number.
- Yes, please open the random envelope according to the screening number or log in the random website to obtain the random number and the random grouping of the subject.

Randomisation No.: |\_\_||\_\_||\_\_||\_\_||

Group of subject:  TIHA  TIVA

Whether the random number has been filled in the cover?

- No
- Yes

\* TIHA, Total inhalation anesthesia and TIVA, Total intravenous anesthesia.

**Perioperative monitoring indicators**

Anesthesia start time: \_\_\_\_\_

Anesthesia end time: \_\_\_\_\_

Operation start time: \_\_\_\_\_

Operation end time: \_\_\_\_\_

Operation time: \_\_\_\_\_

Anesthesia time: \_\_\_\_\_

**1. Insulin (IU/mL)**

30 minutes before operation: |\_\_||\_\_||\_\_||\_\_||

30 minutes after operation: |\_\_||\_\_||\_\_||\_\_||

**2. Cortisol (ng/mL)**

30 minutes before operation: |\_\_||\_\_||\_\_||\_\_||

30 minutes after operation: |\_\_||\_\_||\_\_||\_\_||

**3. Blood glucose (mmol/L)**

Preoperation:  __  __  __	Operation start 2hr:  __  __  __	Postoperation 1hr:  __  __  __
Immediate intubation:  __  __  __	Operation start 3hr:  __  __  __	Postoperation 2hr:  __  __  __
skin incision:  __  __  __	Skin suture:  __  __  __	Postoperation 1d:  __  __  __
Operation start 1hr:  __  __  __	Immediate extubation:  __  __  __	Postoperation 2d:  __  __  __

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

Randomisation No.: | | | | | | | | | |

Subject initials: | | | | | | | | | |

**4. Insulin dosage (IU)**

During operation:	1d after operation:
Operation day:	2d after operation:

**5. Opioid dosage (ug)**

Remifentanil: | | | | | | | |

Sufentanil: | | | | | | | |

**6. In and out volume (ml)**

Crystal input: | | | | | | | |

Crystal input: | | | | | | | |

Blood transfusion: | | | | | | | |

Urine volume: | | | | | | | |

**7. Perioperative vital signs**

	Preoperative	Intubation	skin incision	1hr after operation start	2hr after operation start	3hr after operation start	Skin suture	1hr after operation	2hr after operation
HR (Bpm)									
BP (mmHg)									
BIS								—	—
Spo <sub>2</sub> (%)									

\*HR: Heart rate; BP: Blood pressure; BIS: bispectral index of EEG.

**Postoperative complications record**

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

DD MMM YYYY

Randomisation No.: |\_\_||\_\_||\_\_||\_\_| Subject initials: |\_\_||\_\_||\_\_||\_\_|

**Postoperative complications:**  No  Yes → Please fill in the following form

	<b>POD 1</b>	<b>POD 2</b>	<b>POD 3</b>	<b>Discharge</b>	<b>POD 30</b>
Myocardial infarction	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Stroke	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Renal failure	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Anastomotic fistula	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Stress ulcer	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Incision Infection	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Pulmonary infection	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Other complications	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes
Death	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes

\*POD, postoperative day.

### Adverse Events

**Has the participant experienced any Adverse Events since signing the Informed Consent?**  No  Yes → Please fill in the following form

Adverse Events	Treatment	Outcomes (follow-up)

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

DD MMM YYYY

Randomisation No.: |\_\_||\_\_||\_\_||\_\_||      Subject initials: |\_\_||\_\_||\_\_||\_\_||

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## Off study form

Date Off Study: \_\_\_\_ / \_\_\_\_ / \_\_\_\_\_  
(MM/DD/YYYY)

Date Last Study Medication Taken: \_\_\_\_ / \_\_\_\_ / \_\_\_\_\_  
(MM/DD/YYYY)

**Reason Off Study**      (Please mark only the primary reason. Reasons **other than Completed Study** require explanation next to the response)

- Completed study
- Lost to follow-up \_\_\_\_\_
- Non-compliant participant \_\_\_\_\_
- Concomitant medication \_\_\_\_\_
- Medical contraindication \_\_\_\_\_
- Withdraw consent \_\_\_\_\_
- Death \_\_\_\_\_
- Other \_\_\_\_\_

Investigator's signature: \_\_\_\_\_

Date: \_\_\_\_\_

DD    MMM    YYYY