Dear Mrs/Mr,

First of all, thank you for your interest in our clinical research! We will invite you to participate in a randomized controlled clinical trial of total laparoscopic and open pancreaticoduodenectomy. Before you decide whether to participate in this study, please read the following as much as possible to help you understand the research, the purpose, the research process and deadlines, and what may be brought after you participate in this study, which might be benefits, risks or discomfort. If you prefer, you can also discuss it with your family, friends, or ask your doctor for an explanation.

Research introduction

I. Research background and research purposes

1. Research background

Pancreaticoduodenectomy (PD) is one of the most complicated surgical procedures in abdominal surgery. It includes not only the removal of the head of the pancreas, the common bile duct, the distal stomach, the duodenum, the proximal jejunum, the gallbladder and other organs. It also involves the tedious reconstruction of the digestive tract. It is considered to be the standard surgical method for the treatment of pancreatic head tumors, lower common bile duct tumors, duodenal tumors and other diseases.

Due to the change of surgical instruments and the improvement of surgical techniques, Minimally invasive surgery (MIS) is increasingly used in pancreatic surgery. First reported by Gagner et al., the first laparoscopic pancreaticoduodenectomy was performed in 1994. Then more and more laparoscopic pancreatic surgery is gradually carried out. Many scholars believe that compared with traditional open surgery, laparoscopic surgery has the advantages of less impact on patients, shorter hospital stay, less intraoperative blood loss, etc. Can achieve oncological prognosis and long-term survival similar to open surgery. However, laparoscopic surgery also has problems such as long operation time and high cost. To date, many studies have shown that 3D laparoscopic techniques have significant advantages in gastric, renal, and cervical surgery. However, there are few reports on its application in pancreatic surgery. Only a few meta-analyses were compared
However, the current research has some shortcomings. Different types of surgical methods were collectively referred to as minimally invasive surgery. The baselines of patients were different between different studies. Most of the studies included a small number of patients, high data heterogeneity, and different levels of surgery. The method did not give specific reports and the study could not provide detailed oncology results and long-term follow-up data.

2. Research purposes

The purpose of this study was to evaluate the safety and efficacy of total laparoscopic pancreaticoduodenectomy compared with open pancreaticoduodenectomy.

3. Study participants and expected number of participants

This study included 14 medical center all over China. The number of participants in this study is expected to be 656.

II. Who can participate in this study?

1. The patient is \( \geq 18 \) years old and younger than 75 years old;
2. Highly suspected or histological evidence of pancreas, bile duct, duodenal malignancy, etc.;
3. Those who are highly suspected of malignant tumors but unable to obtain pathological evidence;
4. Benign lesions originate from the pancreas, bile duct, duodenum, stomach and other pancreaticoduodenectomy;
5. The assessment team assessed no significant vascular invasion based on abdominal imaging data before surgery;
6. The subject understands and can cooperate with the study;
7. Subjects can provide and sign written informed consent prior to conducting research-related operations;
8. According to the NCCN guidelines, patients will benefit from this therapeutic procedure.

III. Who is not suitable for research?

1. Preoperative or intraoperative confirmation of distant metastasis of the tumor: intraperitoneal
implantation, distant lymph node metastasis, liver or other organ metastasis;
2. Subjects need to undergo pancreatic body resection, middle pancreatic resection or total
pancreatectomy and other surgical methods;
3. According to the American Society of Anesthesiologists (ASA) the score greater than 4 points,
there is a high degree of surgical risk;
4. The vascular invasion was assessed by the assessment team based on abdominal imaging data
before surgery, and patients requiring combined vascular resection during surgery;
5. Patients with other tumors at the same time;
6. Radical surgery cannot benefit, only palliative surgery will done;

IV. What will be done if you participate in the research?

If you meet the inclusion criteria and agree to participate, you will be tested according to the
following steps: divided into two groups according to the study plan, respectively, undergoing
laparoscopic and open surgery, both groups undergo pancreaticoduodenectomy, you may be
assigned in any group, whether you are enrolling or operating in surgery, your interests will be the
first consideration. All patients underwent routine nursing of biliary and pancreatic surgery, and
collected various indexes before, during and after surgery, including but not limited to blood
routine, blood biochemistry, tumor markers, blood loss, anastomosis, and complications. Conduct
safety and efficacy assessments and judgments. At the same time, follow-up for 24 months. The
time points of follow-up were: January, March, June, December, August, and 24 months after
discharge. The follow-up method was ward follow-up combined with telephone follow-up. The
follow-up included but not limited to the condition/treatment/combination medication and all
adverse events.

V. Possible benefits of participating in the study

Although there is already evidence that pancreaticoduodenectomy is satisfactory for treatment,
this does not guarantee that it will work for you. The open and laparoscopic methods used in this
study are not the only treatments. If your condition is not working, you can ask your doctor about
alternative treatments that are possible.
VI. Adverse reactions, risks and protective measures for participating in the study

During the trial, if there is any discomfort in the study, or the condition changes, or any unexpected situation, regardless of whether it is related to treatment, you should promptly notify your doctor, he/she will make an accurate judgment and medical treatment. deal with. The main adverse reactions and risks are as follows:

1. In the operation, the surgical method is determined according to medical conditions according to the condition;
2. Due to the patient’s condition (critical, complicated, poor systemic conditions), individual differences, sudden and sudden recession may occur during and after surgery, multiple organ failure (such as heart failure, respiratory failure, liver failure, renal function) Failure, DIC, etc.) or unpredictable changes in the condition can be life-threatening;
3. Major bleeding, hemorrhagic shock may occur during surgery, and life-threatening;
4. The operation is due to anatomical variation and severe adhesion for therapeutic purposes. It may be inevitable to damage surrounding and nearby tissues and organs, and the corresponding organs need to be repaired or reconstructed;
5. Special medical supplies such as chemotherapy pumps, anastomotic devices, etc. may be used during surgery, and special treatments such as radiofrequency therapy and cryotherapy may be used during surgery;
6. Tumor patients may not be able to undergo surgical resection due to the condition, or recurrence and metastasis after resection, requiring further treatment;
7. Recurrent bleeding after surgery, local, systemic infection, bile leakage, pancreatic leakage, intestinal leakage, anastomotic leakage and other changes in the condition may be life-threatening and require reoperation if necessary;
8. Other unforeseen or unpredictable adverse consequences and medical risks;
9. may need to be admitted to the ICU ward if necessary after surgery;
10. Postoperative examination may be inconsistent with preoperative diagnosis and intraoperative diagnosis. The final diagnosis is based on postoperative examination;
11. Determine the risk of biopsy of the lesion under the endoscope under the condition of the operation;
12. During the operation, malignant tumor metastasis is found, and it is difficult to cure radically or radically. The risk of radical resection is great. Only palliative anastomosis is possible.
13. During the operation, the abdominal cavity is widely metastasized, and it is impossible to perform resection or palliative anastomosis.
14. Postoperative abdominal adhesions, intestinal adhesions, intestinal obstruction, may require relevant treatment;
15. Long-term bed rest, pulmonary infection, and deep vein thrombosis may occur;
16. Incision healing may occur after surgery, infection of the incision, incision splitting, incisional hernia, etc.;
17. Pancreatic exocrine insufficiency;
18. Laparoscopic pancreaticoduodenectomy may be due to tissue adhesion, intraoperative bleeding, etc.
19. Pneum abdominal syndrome, etc.;

Protection measures, if the patients participating in the trial have the above complications, they will form a professional medical team to deal with and treat them for the first time.

VII. The relevant costs

The patient's follow-up examination, such as abdominal color Doppler ultrasound, abdominal CT cost and adjuvant therapy, chemotherapy and other costs will be reduced or even exempted according to different conditions. If an adverse event occurs in a clinical trial, the Medical Expert Committee will determine if it is related to surgery or trial. The treatment and examinations required for other diseases that you have combined at the same time will not be included in the free range.

VIII. The confidentiality of clinical data

Your medical records (research medical records, CRF, test results, etc.) will be kept completely at the hospital where you are attending. The doctor will record the results of the tests and other tests on your medical record. Researchers, ethics committees, and higher-level medical administrations will be allowed to access your medical records. Any public report about the results of this study will not disclose your personal identity. We will make every effort to protect the privacy of your personal medical information to the extent permitted by law.

According to medical research ethics, in addition to personal privacy information, experimental data will be available for public inquiry and sharing. Query and sharing will be limited to web-based electronic databases, ensuring that no personal privacy information will be disclosed.

IX. How can I get more information?

You can ask any questions about this research at any time and get answers.

If there is any important new information during the study that may affect your willingness to continue your research, your doctor will notify you in a timely manner.
X. You can voluntarily choose to participate in research and withdraw from the study

Whether or not to participate in the research is entirely up to you. You may decline to participate in the study or withdraw from the study at any time during the study, which will not affect your relationship with the doctor and will not affect your medical or other benefits.

For your best interest, your doctor or researcher may discontinue your participation in this study at any time during the course of your research.

XI. What should I do now?

Participation in this clinical study is based on a completely voluntary principle and needs to be carried out with your consent and signed informed consent. Whether or not you participate in this clinical study depends entirely on your own wishes. You have the right to suspend and withdraw from this research treatment at any time. Exiting this study will not affect your medical treatment.

Your physician may suspend your participation in this study in advance if: Your health condition is not suitable for continued participation, or you may not comply with the research program requirements.

The doctor will promptly notify you or your legal representative if there is medical information that may affect your willingness to continue your research during the course of the study. Before you make a decision to participate in this study, please ask your life as much as possible until you fully understand this test study.
Informed Consent

Signature Page

Clinical Research Project: Total laparoscopic pancreaticoduodenectomy versus open pancreaticoduodenectomy (TJDBPS01) a multicenter randomized controlled trial

Research Center Name: ________________________________

I have carefully read the contents of the informed consent form, and the researchers have answered my questions.

I fully participated in the study and fully cooperated with the researcher after fully understanding the purpose, method, possible therapeutic benefits and possible risks and other provisions mentioned in the informed consent form.

I understand that I can withdraw from the study at any time and I do not need any reason. The medical services I receive and the legal rights I enjoy are not affected at all.

Finally, I decided to agree to participate in this study and to ensure compliance with my doctor’s advice.

Subject Signature: ________________________________ Date: ______________

Contact Number: ________________________________

I have explained fully detail to the subjects, including the potential risks.

Doctor Signature: ________________________________ Date: ______________

Contact Number: ________________________________
知情同意书

尊敬的女士/先生：

首先，感谢您对我们这项临床研究的关注！我们将邀请您参加一项腹腔镜和开腹胰十二指肠切除术的随机化对照临床试验。在您决定是否参加这项研究之前，请尽可能仔细阅读以下内容，它可以帮助您了解该项研究以及为何要进行这项研究、研究的流程和期限、参加本研究后可能给您带来的益处、风险和不适。如果您愿意，您也可以和您的家属、朋友讨论，或者请您的医生给予解释。

研究介绍：

一、研究背景和研究目的

1. 研究背景

胰十二指肠切除术(Pancreaticoduodenectomy, PD)，是腹部外科最复杂的手术方式之一，它不仅包含切除胰头、胆总管、远端胃、十二指肠、近端空肠、胆囊等器官，还涉及到了繁琐的消化道重建。被认为是治疗胰头肿瘤，胆总管下段肿瘤，十二指肠肿瘤等疾病的手术方式。

由于手术器械的更迭以及手术技巧的提升，微创手术(Minimally invasive surgery, MIS)被越来越多的运用于胰腺外科中。由 Gagner 等人率先报道，1994 年首次开展第一例腹腔镜下胰十二指肠切除术。而后越来越多的腔镜胰腺手术逐渐开展，许多学者认为腹腔镜手术在与传统的开放手术相比，有对病人打击小，住院时间缩短，术中出血量少等优点；与此同时还能获得与开放手术相似的肿瘤学预后及远期生存期。但是，腹腔镜手术也存在手术时间长，花费高等不可回避的问题。迄今为止，许多研究已表明 3D 腹腔镜技术在胃、肾脏以及宫颈手术方面优势明显。然而关于其在胰腺外科的应用报道甚少。仅有几篇荟萃分析做了腹腔镜和开腹手术的比较，然而纳入的文献质量不高。

然而，目前研究存在以下一些不足。将不同类型的手术方式统称为微创手术进行分析，不同研究间患者的基线并不相同，大部分研究纳入的患者数目较小，数据的高度异质性，手术水平存在差异，不同中心对于手术方式并未给出具体报道以及研究不能详细的提供肿瘤学结果及长期的随访资料。
2. 研究目的
这项研究的目的是为了评估比较在全腹腔镜胰十二指肠切除术较开腹胰十二指肠切除术的安全性和疗效性。

3. 研究参加单位和预计纳入参试者例数
本研究为多中心研究，研究参加单位为包含同济医院在内的国内14家医院，本项研究预计纳入参试者例数为656例。

二、哪些人能参加本研究
1. 患者年龄≥18岁且小于75岁；
2. 高度怀疑或已组织学证据证明为胰腺，胆管，十二指肠恶性肿瘤等；
3. 高度怀疑恶性肿瘤但无法取得病理学证据者；
4. 良性病变来源于胰腺，胆管，十二指肠，胃等需行胰十二指肠切除术；
5. 评估小组术前根据腹部影像资料评估无明显血管侵犯；
6. 受试者理解并能配合本研究；
7. 受试者在开展研究有关的操作之前能提供并签署书面知情同意书；
8. 根据NCCN指南，患者将在此次治疗性手术中获益。

三、哪些人不宜参加研究
1. 术前或术中证实肿瘤远处转移患者：腹腔种植，远处淋巴结转移，肝脏或其他脏器转移等；
2. 受试者需接受胰腺体尾部切除，胰腺中段切除或全胰切除等其他手术方式；
3. 根据美国麻醉医师协会评分(ASA)大于4分，存在高度手术风险者；
4. 由评估小组术前根据腹部影像资料评估血管侵犯，术中需联合血管切除的患者；
5. 同时患其他肿瘤患者；
6. 根治性手术无法获益，仅行姑息性手术治疗者；

四、如果参加研究将要做什么？
如果您符合入选标准并同意参加，将按以下步骤进行试验：根据研究计划分成两组，分别接受腹腔镜及开腹手术，两组均行胰十二指肠切除术，您将有可能
被分配到任何一组，无论是入组或是手术中操作均会以您的利益为第一考虑。术后均予以胆胰外科常规护理，收集术前、术中、术后各项指标，包括但不限于血常规、生化、肿瘤标志物、出血量、吻合方式、并发症等。进行安全性及疗效性的评估和判断。同时进行为期24月的随访。随访的时间节点为，出院后1月，3月，6月，12月，18月及24月，随访方式为病房随访结合电话随访，随访内容包括但不限于病情/治疗/合并用药及所有不良事件。

五、参加研究可能的受益

尽管已经有证据提示胰十二指肠切除对治疗有满意的疗效，但这并不能保证对您肯定有效。本研究所采用的开放及腹腔镜方法也不是治疗的唯一的方法。如若对您的病情无效，您可以向医生询问有可能获得的替代治疗方法。

六、参加研究的不良反应、风险及保护措施

参加本项试验期间，如果在研究中出现任何不适，或病情变化，或出现任何意外情况，不管是否与治疗有关，均应及时通知您的医生，他/她将对此做出准确判断及医疗处理。主要的不良反应及风险陈述如下：

1. 手术中根据病情按医疗原则确定手术方式；
2. 因患者病情（危重、复杂、全身条件差）、个体差异，手术中、手术后可能发生隐性疾患突发，多器官功能衰竭（如心功能衰竭、呼吸衰竭、肝功能衰竭、肾功能衰竭、DIC等）或者发生难以预料的病情变化，可危及生命；
3. 手术中可能发生大出血、失血性休克，危及生命；
4. 手术因解剖变异、严重粘连，为了达到治疗目的，可能无法避免地损伤周围及附近组织器官，需要对相应的器官进行修补或重建；
5. 手术中可能使用特殊医疗用品，如化疗泵、吻合器械等，手术中可能使用特殊治疗，如射频治疗、冷冻治疗等；
6. 肿瘤患者因病情可能无法手术切除，或切除后复发转移，需进一步治疗；
7. 手术后可能发生再出血，局部、全身感染，胆漏、胰漏、肠漏，吻合口漏以及其他病情变化，可能危及生命，必要时需再次手术；
8. 其他无法预料或者不能防范的不良后果和医疗风险；
9. 术后必要时可能需送入 ICU 病房；
10. 术后病检可能与术前诊断，术中诊断不一致，最终诊断以术后病检为准；
11. 根据术中情况判断腔镜下病灶穿刺活检风险；
12. 术中发现恶性肿瘤转移，难以根治性切除或者根治性切除风险巨大，仅行姑息性吻合手术可能；
13. 术中见腹腔广泛转移，无法进行切除或姑息性吻合手术，仅开关腹可能；
14. 术后腹腔粘连，肠粘连、肠梗阻，需要相关治疗可能；
15. 术后长期卧床，肺部感染，深静脉血栓形成可能；
16. 术后可能发生切口愈合不良，切口感染，切口裂开，切口疝等；
17. 胰腺外分泌功能不全；
18. 腹腔镜胰十二指肠切除术因为组织粘连，术中出血等存在中转开腹可能；
19. 气腹综合征等；

保护措施，参加试验的患者如若出现上述的并发症，会组成专业医疗团队第一时间进行处理及治疗。

七、有关费用
患者随访时候的检查，如腹部彩超，腹部 CT 费用及辅助治疗，化疗等费用会根据不同的病情给予不同程度的减低甚至免除。如果在临床试验中出现不良事件，医学专家委员会将会鉴定其是否与手术或试验有关。对于您同时合并的其他疾病所需的治疗和检查，将不在免费的范围之内。

八、临床资料的保密性
您的医疗记录（研究病历，CRF，检验检查结果等）将完整地保存在您所就诊的医院。医生会将化验和其它检查结果记录在您的病历上。研究者、伦理委员会和上级医疗行政管理部门将被允许查阅您的医疗记录。任何有关本项研究结果的公开报告将不会披露您的个人身份。我们将尽一切努力保护您个人医疗资料的隐私。

按照医学研究伦理，除了个人隐私信息外，试验数据将可供公众查询和共享，
查询和共享将只限于基于网络的电子数据库，保证不会泄漏任何个人隐私信息。

九、怎样获得更多的信息？
您可以在任何时间提出有关本项研究的任何问题，并得到相应的解答。
如果在研究过程中有任何重要的新信息，可能影响您继续参加研究的意愿时，您的医生将会及时通知您。

十、可以自愿选择参加研究和中途退出研究
是否参加研究完全取决于您的意愿。您可以拒绝参加此项研究，或在研究过程中的任何时间退出本研究，这都不会影响您和医生间的关系，都不会影响对您的医疗或有其他方面利益的损失。
出于对您的最大利益考虑，医生或研究者可能会在研究过程中随时中止您继续参加本项研究。

十一、现在该做什么？
参加本项临床研究，本着完全自愿的原则，需要在您同意并签署知情同意书的前提下进行。是否参加本项临床研究，完全取决于您本人的意愿，您有权在任何时候选择中止和退出本项研究性治疗，退出本研究并不会影响您的医疗待遇。
您的医师可以在下列情况下提前中止您继续参加本项研究：您的健康状况不适合继续参加，或者您不能遵守研究方案的要求。
如在研究过程中出现可能影响您继续参加研究意愿的医学信息，医生将及时通知您或者您的法定代表。在您做出参加本研究的决定前，请尽可能向您的一生询问有关问题，直至您对本项试验研究完全理解。
知情同意书

签字页

临床研究项目：腹腔镜和开腹胰十二指肠切除术的随机化对照临床试验

研究中心名称：

我已经仔细阅读了知情同意书告知页的内容，研究者已解答了我提出的疑问。我在充分理解了知情同意书提及的本项临床研究的目的、方法、可能获得的治疗利益和可能遇到的风险以及其他条款后，自愿参加此项研究，并承诺与研究者充分合作。

我明白我可在任何时候退出研究，并且不需要任何理由，我得到的医疗服务和享有的法律权利不受任何影响。

最后，我决定同意参加本项研究，并保证遵从医嘱。

受试者签名：  日期：

联系电话：

我确认已向受试者解释本研究的详细情况，包括其权利及可能受益和风险。

医生/研究者签名：  日期：

联系电话：