Current On-Going Research Projects

<table>
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<tr>
<th>#</th>
<th>Researchers</th>
<th>Projects</th>
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| 1 | Assoc Prof Krishna Kumar Madhavan | CDH17 Marker as a Novel Target for Liver and Stomach Cancer Therapies (Co-I)  
• Glypican-3: a potential novel serum biomarker for the early diagnosis of hepatocellular carcinoma (PI)  
• HBV-related hepatocarcinoma: molecular and functional characterization of tumour target and effector immune cells (PI)  
• Feasibility of Non Heart Beating Donor Program in National University Hospital for kidneys and liver transplantation (Co-I)  
• A Phase III randomized, double-blind, placebo-controlled study of sorafenib as adjuvant treatment for hepatocellular carcinoma after surgical resection or local ablation (STORM) (PI) |
| 2 | Asst Prof Iyer Shridhar Ganpathi | Augmentation of Liver Regeneration and Liver Support in Extended Liver Resections and Small for Size Liver (PI)  
• Validation study of a novel molecular method (Fluorescent-in-situ-Hybridization) for cytological detection of pancreatobiliary carcinoma (PI)  
• Risk Factors for Mortality in Severe Acute Pancreatitis (PI)  
• Glypican-3: a potential novel serum biomarker for the early diagnosis of hepatocellular carcinoma (Collaborator)  
• HBV-related hepatocarcinoma: molecular and functional characterization of tumour target and effector immune cells (Co-I)  
• A Phase III randomized, double-blind, placebo-controlled study of sorafenib as adjuvant treatment for hepatocellular carcinoma after surgical resection or local ablation (STORM) (Co-I)  
• Outcomes of patients presenting with asymptomatic elevations of CA19-9 and CEA on health screening (PI)  
• Quality of life and economic impact of living donors for liver (PI)  
• Extended-donor-criteria liver utilization for organ shortage: The National University Hospital experience (PI) |
| 3 | Assoc Prof Stephen Chang Kin Yong | Biocompatible Real-time Implantable Close-loop Glucose-control System (BRICGS) (PI)  
• Phase III Multi-Centre Open-Label Randomized Controlled Trial Of Selective Internal Radiation Therapy (SIRT) Versus Sorafenib In Locally Advanced Hepatocellular Carcinoma (PI)  
• Single Port vs 3-ports Transumbilical Single Incision Laparoscopic Cholecystectomy (PI)  
• Image Guided Robotic Assisted Surgical Training (IRAS) (PI)  
• A prospective, randomized, controlled trial to compare single port laparoscopic cholecystectomy vs conventional laparoscopic cholecystectomy (PI)  
• Common bile duct exploration: Comparison between open and laparoscopic methods (PI)  
• Laparoscopic drainage of liver abscess: Is it a better choice compared to Percutaneous drainage for liver abscess? A retrospective study of patients who underwent either procedures from 2002-2008 (PI) |
# DEPARTMENT OF SURGERY

## Current On-Going Research Projects

### Hepatobiliary & Pancreatic Surgery

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<tr>
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<th>Project Description</th>
<th>PI/Co-I</th>
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<td>3</td>
<td>Assoc Prof Stephen Chang Kin Yong (Cont)&lt;br&gt;[<a href="mailto:stephen_ky_chang@nuhs.edu.sg">stephen_ky_chang@nuhs.edu.sg</a>]&lt;br&gt;HBV-related hepatocarcinoma: molecular and functional characterization of tumour target and effector immune cells (Co-I)&lt;br&gt;Cryopreserved Cadaveric Vascular Grafts: Studying the Long Term Effects of Cryopreservation (PI)&lt;br&gt;Development of an ablation and division device with blood-flow sensor feature (PI)&lt;br&gt;A Phase III randomized, double-blind, placebo-controlled study of sorafenib as adjuvant treatment for hepatocellular carcinoma after surgical resection or local ablation (STORM) (Co-I)&lt;br&gt;Retrospective Review of Hepatic Resections Performed from 1997 to March 2010 (PI)&lt;br&gt;Laparoscopic Cholecystectomy after Endoscopic Ductal Clearance (PI)</td>
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<td>Asst Prof Victor Lee Tswen Wen&lt;br&gt;[<a href="mailto:cfsvltw@nus.edu.sg">cfsvltw@nus.edu.sg</a>]&lt;br&gt;Portable, non-invasive dry weight assessment and vascular access monitoring using modern bioimpedance analysis for optimal management of hemodialysis patients (PI)&lt;br&gt;Long-term study of hepatocellular carcinoma at the National University Health System (PI)&lt;br&gt;Feasibility of Non Heart Beating Donor Program in National University Hospital for kidneys and liver transplantation (Co-I)&lt;br&gt;Liver cancer stem cells: Identification of novel markers and establishing a xenograft model for screening of chemotherapeutic agents targeting liver cancer stem cells (PI)&lt;br&gt;Real-Time Continuous Perfusion Monitoring of Liver Allograft in Liver Transplantation with a Wireless Vascular Flow Sensor (PI)&lt;br&gt;Development of a Novel Endovascular Stent Graft Device (Collaborator)&lt;br&gt;Glypican-3: a potential novel serum biomarker for the early diagnosis of hepatocellular carcinoma (Co-I)&lt;br&gt;HBV-related hepatocarcinoma: molecular and functional characterization of tumour target and effector immune cells (Co-I)&lt;br&gt;A Phase III randomized, double-blind, placebo-controlled study of sorafenib as adjuvant treatment for hepatocellular carcinoma after surgical resection or local ablation (STORM) (Co-I)</td>
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