

GENERAL AND VASCULAR SURGERY RESEARCH UPDATE Q1 2019

Contents

Welcome to the first general and vascular surgery research newsletter! Our KPNC surgery group seeks evidence-based improvements to improve clinical care. This research update is a first step of getting together interested people, celebrating those involved in data-driven inquiry, and planning next steps for data collection, and how it will inform clinical change.

In this first issue, we share results from our recent KPNC surgeons survey, describe the research interests of the group, provide information about upcoming events, highlight some internal funding opportunities, and finally, recognize recent achievements and the cumulative research published by KPNC surgeons. In future updates, we may choose to break out certain specialties depending on level of interest and productivity.

Research Survey Updates

A total of 9 KPNC general surgeons responded to our survey indicating an interest in research and providing information about specific topic areas of interest and research recommendations. Most survey respondents requested 1-2 surgery research group updates every year, in newsletter or Webex format.

THANK YOU for your thoughtful input regarding knowledge gaps in surgery, improving practice efficiency, and generating high-impact research questions. Your ongoing suggestions and contributions are greatly appreciated!

Here is a summary of some select research interests put forward by your colleagues:

- 1) Investigating long term clinical outcomes, cost effectiveness and quality of life data associated with the implementation of a multidisciplinary regionally advanced melanoma program
- 2) Determine the optimal sequence and timing of follow up scans in patients with high risk melanoma
- 3) Study the effects of perioperative optimization (glucose, anemia, albumin) on overall operative mortality
- 4) Examine the outcomes for complicated diverticulitis- surgery vs observation
- 5) Evaluate type of pancreas anastomosis technique
- 6) Evaluate optimal frequency and duration of surgeon follow-up after cancer surgery
- 7) Develop a hernia outcomes registry
- 8) Evaluate same day lap appendectomy outcomes and identify predictors of success
- 9) Examine reasons for urinary retention after hernia surgery
- 10) Examine Colon ERAS data
- 11) Laparoscopic cholecystectomy management retrospective analysis
- 12) Best practices for diverticulitis and gallbladder dyskinesia
- 13) Is bowel prep needed for elective colonic surgery?

Who's Doing Research?

Currently, there are numerous research activities going on in surgery. Here is a recent update, please let us know if there are any additions or updates!

Vascular Surgery Clinical Trials (active):

BEST-CLI:

PI: Robert Chang, MD - Vascular Surgery - Golden Gate

Sub-Investigators

Oswaldo Yano, Hong Hua, Aaron Baker, Jeffry Cardneau
Michael Peterson, Joy Garg, Kian Mostafavi, Tazo Inui
Owen Palmer, Rishad Faruqi, Nayan Sivamurthy, Abed Joseph

Progress Summary:

Expected total enrollment 2100
135 enrolling sites , 1485 patients enrolled overall
We have 2 Screen failures, 2 Early Terminations and 2 deaths, current enrollment is 9 subjects
6 patients at San Leandro, 1 at Fresno, 2 at South San Francisco

CREST-2:

PIs: Mai Nguyen-Huynh, MD - Neurology - Diablo
Robert Chang, MD - Vascular Surgery - Golden Gate

Sub-Investigators

Robert Chang and Craig Hou
Oswaldo Yano, Hong Hua, Aaron Baker and Kenneth Fox
Jeffry Cardneau and Jonathan Artz
Joy Garg, Kian Mostafavi and Jina Janav
Owen Palmer and Vivek Rao
Rishad Faruqi, Nayan Sivamurthy and Khamidulla Bakhadirov

Progress Summary:

Expected enrollment goal is 2480 (1240 in each study), 122 enrolling sites
1173 patients enrolled overall (602 CEA; 571 CAS)
We have screened 41 subjects, 10 currently enrolled

P-Branch:

PI: Oswaldo Yano, MD

Sub-Investigators

Oswaldo Yano, Hong Hua, Nayan Sivamurthy

Progress Summary:

Expected enrollment goal is 82

There are 28 enrolling sites , 53 patients enrolled overall
We have screened 78 subjects (18 patient submitted for sponsor approval)
4 patients enrolled at San Francisco

Other Vascular Surgery Projects:

Project: Long term Follow up of endovascular aortic aneurysm repair in the Kaiser Permanente Northern California region 2000-2009

Year Funded: 2011

PI: Robert Chang MD

Facility: South San Francisco

Project: A Natural History of Descending Thoracic Aortic Dissections in Northern California Kaiser Permanente: An analysis of incidence, interventions and outcomes during longitudinal follow-up.

Year Funded: 2018

PI: Aaron Baker, MD

Facility: San Francisco

Project: Current Outcomes & Management of Asymptomatic Carotid Stenosis (COMACAS)

Year Funded: 2015

PI: Robert Chang, MD

Facility: South San Francisco

General Surgery Clinical Trials/Research:

Project: "A Prospective, Multicenter Post-Market Study to Evaluate and Compare the Clinical Outcomes, pain and patient Quality of Life after Open, Laparoscopic or Robotic Assisted Hernia (Incisional and Inguinal) Repair"

Year Funded: 2018

PI: Elliott Brill, MD

Facility: Multiple

Source: Intuit Surgical

Project: Selected Surgical Adverse Outcomes (SSAO)

Year Funded: 2011

PI: Adam Schlifke, MD

Facility: Oakland

Project: Non-opioid analgesia following minimally-invasive bariatric surgery

Year Funded:

PI: Pandu Yenumula, MD

Facility: South Sacramento

Project: Non-opioid analgesia following minimally-invasive bariatric surgery

Year Funded:

PI: Pandu Yenumula, MD

Facility: South Sacramento

Thoracic Surgery Clinical Trials/Research

Project: Predictors of survival in stage I non-small cell lung cancer

Year Funded: 2008

PI: Richard Bloom, MD

Facility: Santa Clara

Project: Impact of thoracic regionalization on outcomes for esophageal cancer patients undergoing esophagectomy

Year Funded: 2017

PI: Jeffrey Velotta, MD

Facility: Oakland

Project: Effect of Consolidating Thoracic Surgery Care within an Integrated Healthcare System on Outcomes for Lung Cancer Patients Undergoing Pulmonary Lobectomy

Year Funded: 2018

PI: Thomas Tung, MD

Facility: Oakland

HOT off the press:

Congratulations to the Thoracic Surgery group for their presentation and media exposure related to improved outcomes after thoracic surgery after implementation of regional restructuring!

This is a great example of impactful clinical research. We look forward to more about this. See the links below of their STS presentation.

<https://www.newswise.com/articles/lung-cancer-surgery-patients-may-reap-benefits-of-larger-more-centralized-hospitals#.XFDZVslfJ> Q.email

https://www.youtube.com/watch?v=0toYVjr9WuM&list=PL9CqmhZPhMJ680SXeljXU_JKQkV2q2epD&index=2

Suggested Next Steps

We plan to further discuss this with your chief's group and Dr Morris, but here are some suggested steps to take

1. Increase awareness: Webex to facilitate idea development and answer questions
 - a. Research training—what is it? IRBnet
 - b. Online resources
 - c. Funding opportunities and deadlines
2. Identify stakeholders: Facilitate discussion around high priority topics in your specialty and assist in assembling the appropriate team members
3. Assist in preliminary idea generation and research question development
4. Develop and implement a shared-resource tool to facilitate and engage stakeholders

Upcoming Events

10th Annual KP National Surgical Symposium, Seattle, WA June 20-22, 2019

Recent Publications Co-authored by KPNC Surgeons

KPNC Surgeons' Publications from 2017 to Present:

The following is a list of publications from those respondents to the surgery survey. Please let us know if there are other articles from our KPNC group to highlight!

1. **Survival and Reintervention Risk by Patient Age and Preoperative Abdominal Aortic Aneurysm Diameter after Endovascular Aneurysm Repair.** R. J. Hye, A. U. Janarious, P. H. Chan, G. Cafri, R. W. Chang, T. F. Rehring, N. A. Nelken and B. B. Hill,.2018.10.1016/j.avsg.2018.05.053
2. **Regionalization of Thoracic Surgery Improves Esophagectomy Outcomes for Patients with Esophageal Cancer. Poster session presented at the Western Thoracic Surgical Association Annual Meeting, Goleta, CA.** Ely, S., Alabaster, A., Ashiku, S.K., Patel, A., Velotta, J.B. <http://www.westernthoracic.org/meetings/abstracts/2018/CF9.cgi>. (2018, June).
3. **The Impact of Smoking on Sentinel Node Metastasis of Primary Cutaneous Melanoma** M. S. Jones. P. C. Jones, S. L. Stern, D. Elashoff, D. S. B. Hoon, J. Thompson, N. Mozzillo, O. E. Nieweg, D. Noyes, H. J. Hoekstra, J. S. Zager, D. F. Roses, A. Testori, B. J. Coventry, M. B. Smithers, R. Andtbacka, D. Agnese, E. Schultz, E. C. Hsueh, M. Kelley, S. Schneebaum, L. Jacobs, T. Bowles, M. Kashani-Sabet, D. Johnson and M. B. Faries,.2017.24:2089-2094.10.1245/s10434-017-5775-9
4. **Is Pregnancy-Associated Melanoma Associated with Adverse Outcomes?** M. S. Jones, J. Lee, S. L. Stern and M. B. Faries, 2017.225:149-158.10.1016/j.jamcollsurg.2017.02.011
5. **Insights into Local Tumor Microenvironment Immune Factors Associated with Regression of Cutaneous Melanoma Metastases by Mycobacterium bovis Bacille Calmette-Guerin.** J. Yang, M. S. Jones, R. I. Ramos, A. A. Chan, A. F. Lee, L. J. Foshag, P. A. Sieling, M. B. Faries and D. J. Lee,.2017.7:61.10.3389/fonc.2017.00061
6. **Bariatric surgery results: reporting clinical characteristics and adverse outcomes from an integrated healthcare delivery system.** Li R.A., Fisher D.P., Dutta S, O'Brien R.M., Ackerson L.M., Sorel M.E., Sidney S. 2015. 11(5): p. 1119-25 DOI: 10.1016/j.soard.2015.03.002

7. Ten-year results of endovascular abdominal aortic aneurysm repair from a large multicenter registry. Chang RW, Goodney P, Tucker LY, Okuhn S, Hua H, Rhoades A, Sivamurthy N, Hill B. 2013 Aug;58(2):324-32. doi: 10.1016/j.jvs.2013.01.051. Epub 2013 May 14.