

Collaboration between LSUHSC and OMCK • 200 West Esplanade Ave., Suite 200 • Kenner, LA 70065  
 Phone: 504-464-8500 • 1-866-91-ZEBRA • www.ochsner.org/nets

J. Philip Boudreaux, MD, FACS • Richard Campeau, MD, FACNM • Virendra Joshi, MD, FACP, AGAF • Ryan Majoria, MD  
 Daniel Raines, MD • Robert Ramirez, DO • Yi-Zarn Wang, MD, DDS, FACS • Eugene Woltering, MD, FACS

## Recent Research from Our Clinic

### Improved Survival with Cytoreduction of Pancreatic Islet Cell Tumors

By: Dr. Eugene Woltering



Pancreatic neuroendocrine tumors (pNETS) comprise <2% of all pancreatic tumors. We hypothesized that surgical cytoreduction of stage IV pNETS would positively affect survival rates. We reviewed the charts of 92 pNET patients with liver metastases. Sixty-seven (67/92, 73%) patients had nonfunctional pNETS and 25 (25/92, 27%) had functional pNETS. Sixty-one (61/92, 66%) patients had their pancreatic primary resected, 5 patients (5/92, 5%) had resection of their liver metastases without resection of their primary. Twenty-six (26/92, 28%) patients did not undergo any NET-related surgeries. Median survival from pathologic diagnosis of a NET was 113 months. The 5- and 10-year Kaplan-Meier survival rates from diagnosis were 69% and 49% respectively. Aggressive surgical cytoreduction of pNETS is warranted and positively impacts survival. Improved survival in non-surgical patients compared to prior reports may be due to multidisciplinary approach to care. Additional studies are needed to further investigate factors that may impact survival.

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Resection	n=	Median Survival (months)	5- Year Survival Rate	10- Year Survival Rate
Primary Only	20	122	82%	66%
Primary + Liver	41	113	72%	51%
No Resection	26	41	46%	37%
Overall	92	113	69%	49%
Halfdanarson et al	893	17	19.5%	7.1%

## Recent Presentations

### The Effects of Peritoneal Carcinomatosis in the Prognosis of Patients with Advanced Midgut NETs

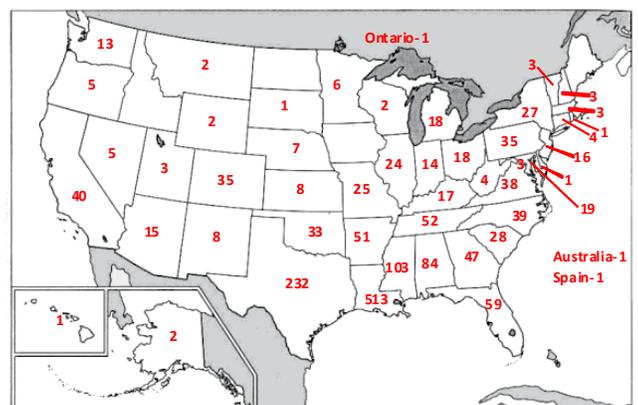
By: Dr. Yi-Zarn Wang



Dr. Wang presented his research on carcinomatosis (details in the last newsletter issue) at the American College of Surgeons (ACS) Annual Meeting. This is the third year in a row that Dr.

Wang's work has been selected for this meeting. The ACS is the largest surgical organization meeting in the world with thousands of members attending annually.

## Interesting Facts Check out our current patient distribution!



## Clinical Trials

### **177Lu DOTA-TATE: Peptide Receptor Radionucleotide Therapy (PRRT) A Open to Accrual**

By: Dr. Richard Campeau



Our site has recently been approved to move forward; our first patient has been enrolled. This is a phase III, multicenter, stratified, open, randomized comparator-controlled study. Ochsner Medical Center-Kenner is one of the centers; there are 13 additional centers in the United States and 28 centers in

Europe. In this study, treatment with 177Lu-DOTA0-Tyr3-Octreotate plus best supportive care (30 mg Octreotide LAR) (arm 1) will be compared to treatment with high dose (60 mg) Octreotide LAR (arm 2) in patients with inoperable, somatostatin receptor positive, histologically proven midgut carcinoid tumors. The objective tumor response in both groups will be assessed every 12±1 weeks from the first treatment date. The primary objective of the study is to compare progression free survival in arm 1 vs. arm 2.

## Clinical Trials

### **Potential Proton Pump Inhibitor (Part II) Study**

By: Dr. Daniel Raines



Last year Dr. Raines performed a study on chronic proton pump inhibitor (PPI) use. He determined that chronic PPI use resulted in significant increases in CGA and gastrin compared to controls. However, Pancreastatin levels in both groups were identical.

Since pancreastatin levels did not change with chronic PPI use, pancreastatin levels may be used to distinguish between drug induced changes in biomarkers and tumor-related increases. Dr. Raines is now in the process of obtaining funding for part II of this study- which would look at how long it takes to for gastrin levels to normalize after stopping PPI therapy. More details to come.

**Please call (504) 464-8500 if you are interested in participating.**

## New Surgical Technology

By Dr. J. Philip Boudreaux



Traditionally, surgeons are hesitant to explore and resect carcinoid tumors with mesenteric vascular encasement (MVE). Following a medical record review of 110 patients

who underwent cytoreductive therapy, we found that surgical decompression of MVE was safe and successful. Half of the patients operated upon in our clinic were evaluated and declared “unresectable” elsewhere. Cytoreduction of carcinoid with MVE effectively relieved symptoms with no significant increase in morbidity or mortality rates. Furthermore, without surgical intervention of carcinoid with MVE, patients are at risk of developing intestinal obstruction and/or intestinal ischemia known sequelae of this condition. Symptoms range from asymptomatic to pain, cramping and bloating after meals, to failure to thrive and profound weight loss. This can be caused by partial intestinal obstructions, inadequate blood flow to



the intestine causing “intestinal angina”, and malabsorption. Mesenteric vascular encasement alone should not preclude carcinoid patients from cytoreductive surgery. These tumors should be resected by surgeons that are experienced and comfortable with this procedure.

Additionally, we find that patients who have mesenteric vascular encasement are often candidates for Nanoknife ablation of these tumors which are wrapped so tightly around the mesenteric blood supply that they cannot be removed. These tumors can be safely treated without injury to the nearby bile ducts and blood vessels with this new technology. Patients with mesenteric vascular encasement should be carefully evaluated in light of their overall tumor burden and nutritional status in a multidisciplinary setting, as it is often difficult to discern the symptoms of intestinal obstruction, intestinal ischemia, malabsorption, and carcinoid syndrome, and which aspect(s) of the disease is/are causing the symptoms. Surgical candidacy is best determined in this multidisciplinary setting.

## Nutrition Corner:

# Diarrhea Management: Diet Matters!

By: Leigh-Anne Burns



Diarrhea, as a diagnosis, may be one word but it has many causes. In treatment of Neuroendocrine Tumors (NETs), diarrhea is a common concern. The causes may vary, or even change, after surgery

and during the treatment of tumors. Adjustments in the types and timing of foods and fluids can improve the symptoms of diarrhea and/or steatorrhea.

Implementing a meal plan used to treat symptoms caused by rapid transit of foods through the GI tract, referred to as 'dumping syndrome', can be the place to start. Basic dietary suggestions patients can use to help with diarrhea are to:

- Chew foods well
- Avoid concentrated sweets and sugary foods and fluids
- Eat smaller meals 6 – 8 per day
- Limit fluids with meals and drink to isotonic beverages
- Separate solids and liquids at meals (drink fluids 30 minutes prior to or 1 hour after solids).
- Avoid extreme hot or colds
- Choose low fat foods and fluids
- Increase soluble fiber and decrease insoluble fibers
- Rest after meals for ~ 15 minutes



## Helpful guides and recipes to relieve common concerns when treating cancer symptoms including diet and diarrhea management:

- *A Patients Guide to managing Short Bowel* by Carol Rees Parrish, Ms, RD available at [www.shortbowelsupport.com](http://www.shortbowelsupport.com)
- *Eating Well through Cancer* by Holly Clegg and Gerald Miletello MD [www.hollyclegg.com](http://www.hollyclegg.com)
- *Living with Cancer* by Betty Crocker <http://store.bettycrocker.com/>

### QUICK CHICKEN PASTA (from *Eating Well Through Cancer*)

- 1 Tbsp Olive Oil
- 2 lb boneless skinless chicken breasts cut into strips
- Salt and pepper to taste
- 1 tsp minced garlic
- 1 Tbsp dried basil leaves
- 1/3 cup canned fat-free chicken broth
- 1 (8 ounce) package angel hair pasta
- 1/4 cup grated Romano Cheese
- 1 large tomato, diced (optional)
- 1 cup sliced mushrooms (optional)
- 1/2 cup chopped red onion (optional)

In a large pan coated with nonstick cooking spray, heat the olive oil and sauté the chicken until almost done, about 4 minutes. Season with salt and pepper. Add the tomato, mushrooms, onion (if tolerated), garlic and basil, stirring for 5 minutes until veggies are tender. Add the chicken broth, cooking until heated through. Meanwhile, cook the pasta according to package directions, omitting any oil or salt. Drain and set aside. When the chicken is done, toss with pasta and Romano cheese.

Nutritional Info: Calories 507; Protein 61g, Carbohydrate 43g, Fat 8g, Calories from fat 15%, Saturated Fat 2g, Dietary fiber 2g, Cholesterol 134mg, Sodium 229mg, Diabetic Exchanges: 7 very lean meat, 3 starch.

## UPCOMING EVENTS

**NET Cancer Patient Conference** – Dr. Woltering & Dr. Wang presenting  
Los Angeles, CA; Saturday, December 14, 2013  
Visit [www.carcinoidawareness.org](http://www.carcinoidawareness.org) for more information.

**Southern Surgical Association** – Dr. Boudreaux & Dr. Woltering presenting  
Hot Springs, VA; December 1-4, 2013

**New Jersey NETs Support Group** – Dr. Wang presenting  
November 1-2, 2013

**Louisiana Carcinoid/NET Patient Support Group**  
Ochsner Medical Center-Kenner; Last Sunday of the month in January and June (3pm)

## J. Philip Boudreaux, MD, FACS

*Professor of Surgery at LSUHSC School of Medicine; Director of Liver/Pancreas Transplant Services*



Dr. Boudreaux's surgical interests include surgical treatment of neuroendocrine tumors, hepatobiliary and pancreatic surgery, radio frequency ablation of liver tumors, liver, pancreas and kidney transplantation, and organ donation.

## Richard Campeau, MD, FACNM

*Clinical Professor of Radiology and Internal Medicine at LSUHSC and Tulane University*



Dr. Campeau's clinical interests include diagnosis and staging of neuroendocrine tumors, nuclear medicine therapies, nuclear medicine imaging exams: 1-123 MIBG, In-111 octreoscans, PET/CT, thyroid scanning, hepatic imaging and others.

## Virendra Joshi, MD, AGAF

*Advanced Endoscopy Services, Ochsner Medical Center*



Dr. Joshi completed fellowship training in Gastroenterology, Hepatology & Nutrition, and Advanced Endoscopy. He is Board Certified in Gastroenterology & Hepatology and Internal Medicine. He specializes in advanced interventional endoscopy.

## Ryan Majoria, MD

*Interventional Radiologist, Proctor for Y-90 SirSpheres Radioembolization*



Dr. Majoria specializes in Y-90 procedures, extending survival rates for patients with inoperable liver cancer. He has completed hundreds of treatments with SIR-Spheres® microspheres containing yttrium-90, a beta-radiating isotope.

## Daniel Raines, MD

*Assistant Professor at LSUHSC School of Medicine; Acting Section Chief for LSU Gastroenterology*



Dr. Raines specializes in evaluation and treatment of digestive disease, including both gastroenterology and hepatology. His current focus of research is in the field of small bowel disease. He is one of the few gastroenterologists in the country that performs balloon enteroscopy to evaluate the entire small intestine.

## Robert Ramirez, DO

*Assistant Professor of Clinical Medicine at LSUHSC School of Medicine*



Dr. Ramirez's clinical interests include thoracic malignancies, gastrointestinal malignancies, and carcinoid tumors. His research is geared towards lung and neuroendocrine tumors. He is board certified in internal medicine and medical oncology.

## Yi-Zarn Wang, MD, DDS, FACS

*Professor of Surgery at LSUHSC School of Medicine*



Dr. Wang's clinical interests include neuroendocrine tumors and all types of cancer, including cancer of the liver, pancreas, esophagus, stomach, intestine, colon/rectum, soft tissue, retroperitoneal and melanoma.

## Eugene Woltering, MD, FACS

*James D. Rives Professor of Surgery and Neuroscience; Section Chief of Surgical Endocrinology at LSUHSC School of Medicine*



Dr. Woltering specializes in the diagnosis and management of all types of neuroendocrine tumors. His laboratory has produced over 150 peer reviewed publications and has 16 patents, most of which apply directly to neuroendocrine tumors.