

The state of the Life Raft Group in 2006

Scherzer reviews Life Raft accomplishments over the past year.

By Norman J. Scherzer
LRG Executive Director

The mission of the Life Raft Group remains the survival of patients with GIST...

By making sure that no one dies because they cannot access life-saving treatment...

By making sure that no one dies because of ignorance, either their own or that of their physician...

By ensuring that no one has to face GIST alone...

And, by directing the coordinated implementation of a strategic plan to find a cure for GIST...

The following projects illustrate the new challenges the Life Raft Group continued to take on in 2006:

- Our monthly newsletters, websites, listservs and pamphlets reached growing audiences around the world. We continued to expand our website, including our worldwide GIST Specialist Directory. Our newest website, the Global GIST Network (www.globalgist.org), was extremely cost effective in linking patients and caregivers to resources in their own country and languages.

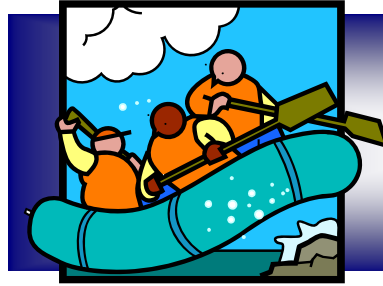
- Our third annual Life Fest meeting brought patients and caregivers from the United States, Europe and South America together in Dallas, Texas along with



SCHERZER

See LIFE RAFT, Page 6

Battling gastrointestinal stromal tumor



LIFE RAFT GROUP

January 2007

In memory of Jennifer Kelly, Peggy Howe, & Lee Cousins

Vol. 8, No. 1

Overcoming treatment resistance in GIST patients

By Dr. Jonathan A. Fletcher
Department of Pathology
Brigham and Women's Hospital
Boston, Mass.

Note: Dr. Jonathan Fletcher is a member of the LRG Research Team working to understand and overcome GIST treatment resistance. This is the first article in a series to be written by each of the key research team members. In September 2006, Dr. Fletcher was presented with the LRG's first Researcher of the Year Award by Dr. Daniel Vasella, Chief Executive Officer of Novartis, at a

meeting of the Life Raft Group in Dallas, Texas. He is considered by the LRG to be the lead coordinator of the research team.

Most GISTs are "driven" by mutations of the KIT or PDGFRA genes. The mutant KIT or PDGFRA genes produce activated receptor tyrosine kinase proteins, and the activated proteins send signals into the GIST cells, directing the cells to grow. In fact, these activated proteins are largely responsible

See RESISTANCE, Page 4



Dr. Jonathan Fletcher presents LRG Research Team goals at Life Fest 2006.

Questions to consider for adjuvant treatment

By Jerry Call

GIST patients face many decisions about their treatment. Many GIST patients have surgery to remove a primary tumor and do not have detectable metastases at the time of surgery. This large group of patients faces the decision of whether or not to take Gleevec to try to prevent or delay a recurrence. Adjuvant therapy refers to additional treatment given after a main mode of therapy (the main treatment is usually surgery). For example, Gleevec given after surgery in hopes of preventing or delaying a recurrence is called adjuvant therapy.

Several adjuvant Gleevec trials are ongoing, but results from these trials will take years. The predominant opinion that I have heard from GIST experts is that adjuvant treatment is a research treatment and should only be given in clinical trials. I respect this opinion and await the results of these trials before I can make any finite judgment about the benefits of adjuvant Gleevec.

Many GIST patients, however, do not have the time to wait for the results of the adjuvant Gleevec trials; they have to make decisions immediately. For some, part of the decision is made for them; they do not have insurance that will cover adjuvant treatment. Their only choice is to enter a trial where some of the trials may contain a placebo. Most patients recognize that the benefit, if any, of adjuvant Gleevec is unknown and many gladly participate to help answer the questions about adjuvant Gleevec.

Some patients do have insurance that will pay for adjuvant Gleevec and these patients have a decision to make. They may receive advice for or against adjuvant treatment. In the absence of clinical trial results, the remainder of this article will attempt to convey some of the potential pros and cons of adjuvant Gleevec for GIST patients. It is written

by a layperson and is intended to provide discussion points for patients to talk to their doctors about.

Some limitations of adjuvant trials:

- Most of the trials are still accruing patients. Even after patient accrual is finished, it will take years before the results are final. It is possible that we may see some interim data before this.
- Patients may continue to take Gleevec on their own after the trial period. This may affect the trial results.
- The trials only examine lower doses of Gleevec.
- All of the existing adjuvant Gleevec trials give Gleevec (or placebo) for a fixed period of time (varying from one to three years) and then Gleevec is discontinued.

Does adjuvant Gleevec prevent recurrence?

This is unknown and the subject of the trials. It is well established that patients with measurable disease that stop taking Gleevec have a very high chance of progression. Gleevec does not kill all GIST tumor cells. Some residual cells remain alive after/during Gleevec treatment which become active again after Gleevec is stopped. The number of residual cells may vary greatly from patient to patient. Some may only have a small number of viable cells left and, for others, the vast majority may still be viable.

Does adjuvant Gleevec promote resistance?

This is unknown. Theoretically, for KIT exon 9 patients, the 400 mg dose being used in adjuvant treatment has been shown to be ineffective as a first-line treatment against measurable disease. For patients with measurable disease, Heinrich et al. showed that patients on high-dose Gleevec respond 8 times as often as patients on low-dose Gleevec.

The Life Raft Group

Who are we, what do we do?

The Life Raft Group is an international, Internet-based, non-profit organization offering support through education and research to patients with a rare cancer called GIST (gastrointestinal stromal tumor). The Association of Cancer Online Resources provides the group with several listservs that permit members to communicate via secure e-mail. Many members are being successfully treated with an oral cancer drug Gleevec (Glivec outside the U.S.A.). This molecularly targeted therapy represents a new category of drugs known as signal transduction inhibitors and has been described by the scientific community as the medical model for the treatment of cancer. Several new drugs are now in clinical trials.

How to join

GIST patients and their caregivers may apply for membership free of charge at the Life Raft Group's Web site, www.liferaftgroup.org or by contacting our office directly.

Privacy

Privacy is of paramount concern, and we try to err on the side of privacy. We do not send information that might be considered private to anyone outside the group, including medical professionals. However, this newsletter serves as an outreach and is widely distributed. Hence, all articles are edited to maintain the anonymity of members unless they have granted publication of more information.

How to help

Donations to The Life Raft Group, incorporated in New Jersey, U.S.A., as a 501(c)(3) nonprofit organization, are tax deductible in the United States.

Donations, payable to The Life Raft Group, should be mailed to:
The Life Raft Group
40 Galesi Dr., Suite 19
Wayne, NJ 07470

Disclaimer

We are patients and caregivers, not doctors. Information shared is not a substitute for discussion with your doctor. As for the newsletter, every effort to achieve accuracy is made but we are human and errors occur. Please advise the newsletter editor of any errors.

Finding a silver-lining when living with cancer

By Erin Kristoff

This article is part of the “Artists of the Life Raft Group” series. The series focuses on the various talents of our members and how it helps them cope with their cancer.

Rachel Tate is very excited about a new change in her life. She is about to move into a new house that has a studio. Why is this so important? Because Rachel will have a new space to do her favorite activity with her sister, both of whom love the art of silversmithing. Rachel cuts, forges and solders silver. Living in South Carolina, Rachel lives close to silver mines and sometimes she and her sister mine their own stones.

This was not always Rachel’s favorite past time. It took a little push by someone very special for Rachel to discover the joys of silversmithing. “GIST inspired me, really. My sister has been my guardian angel and taken care of me, and has been so wonderful. Right after I had surgery and found out four years ago that I had cancer, she gave me a trip to a folk art school for my birthday and I got to pick which class I wanted, so I picked silversmithing. She went with me and we both got hooked on it. It was really her trying to find something that would inspire me and get my mind off of [GIST].”

And inspire her she did. Rachel and her sister now have their own company named “Oops” (Named for the word they used many times a day when first starting their endeavor) and

sell their jewelry and other silver pieces at private showings. They are different from many artists in that they polish their silver and bring it to a nice shine before completion. Most choose to leave their pieces in a dull form, but Rachel and her sister love to take on the difficult task of polishing and making the silver brilliant. “Our favorite instructor used to call us the Shiny Girls!”

This art has also aided Rachel in her battle with GIST. “I can turn out a beautiful piece of jewelry and it just takes me into another world. One piece in particular always brings a smile to her face. “It was a piece we entered into a national contest. It was a labor of love and it turned out so beautifully. It is an old fashioned garden party hat, when you look at it you just feel like you’re at a garden party. Any time we can bring joy into our lives it lifts us up out of this cancer.” Rachel thinks that everybody fighting GIST can feel this way.

“Anybody that has [cancer] should find some kind of outlet to give them a sense of peace. It takes you out of the misery and the worry. Get a hobby!” When Rachel is not busy forging silver, she likes to read and spend time with her seven grandchildren. In fact, on a recent trip to Dana-Farber Cancer Institute, Rachel showed her oldest grandson (age 12) the



TATE

sites of Boston. “I try to turn those trips into a fun time.” Rachel’s favorite place in Boston is the Museum of Fine Arts and the impressionist gallery, housing famous pieces by Van Gogh, in particular.

When she is home Rachel has her three sons, sister and brother-in-law to help support her and lift her spirits up, as well as her church. “My friends at church—they pray for me and I truly believe in the power of prayer.”

Rachel has no complaints; her art, family and friends have made her life whole, she feels truly blessed and does not fear for her future. “My life is so full, it’s just so wonderful. I would like to see my grandchildren mature and be a part of their lives for as long as possible. But I don’t feel that cloud hanging over my head.”



One of Tate’s favorite jewelry pieces is entitled “Garden Party Hat.”

RESISTANCE

From Page 1

for causing GISTs to develop from normal cells in the first place.

Most patients with GIST have their lives prolonged and suffering ameliorated using first-line treatment with imatinib mesylate (Gleevec™) which binds directly to the mutant KIT and PDGFRA proteins and inhibits their activity (1;2). The striking clinical responses to imatinib fully validate the essential oncogenic role served by KIT and PDGFRA in GISTs. Notably, KIT activation is not just essential to the development of GISTs, but actually plays an initiating oncogenic role in a subset of patients (3-5). It is not surprising, therefore, that kinase-targeting therapy with imatinib has profound effects on GIST viability, given that most GIST cells depend on an uninterrupted chain of signals emanating from the constitutively activated KIT or PDGFRA proteins. Unfortunately, even patients with nearly complete clinical responses can develop resistance to imatinib, as manifested by clinical progression of GIST. Such clinical progression typically occurs after a median of approximately 18 to 24 months after the start of imatinib therapy. The alternate small molecule therapeutic, sunitinib malate (Sutent™) which inhibits a broader spectrum of tyrosine kinase signaling proteins, can induce clinical disease control and prolong survival for patients when given second-line following failure of imatinib (6), but many patients with imatinib-resistant GIST do not benefit from sunitinib. Given that few patients have a complete response to imatinib, it is possible that most patients with metastatic GIST will ultimately develop imatinib resistance mechanisms. Several studies have shown that the dominant imatinib resistance mechanisms vary from patient to patient, and that resistance mechanisms can also vary between different metastatic lesions in a given patient (7-9).

KIT oncogenic exon 11 mutations, which are found in approximately 75 percent of GISTs, abrogate juxtamem-

brane region autoinhibition of the KIT kinase. Virtually all of these KIT exon 11 mutants are highly sensitive to imatinib, and patients with such mutations have better than an 80 percent clinical response rate to imatinib

(10;11). At time of clinical progression on imatinib, most GIST patients with “primary” KIT juxtamembrane mutations will demonstrate additional mutations in the kinase domain (7-9;12). These kinase domain mutations are found on the same “alleles” (i.e. the same copies of the KIT gene) as the primary exon 11 mutants, and are presumably present in a small percentage of cells in the untreated GISTs – providing a selective advantage to those cells during imatinib therapy, rather than arising, *de novo*, as a complication of imatinib. Some of these secondary kinase domain mutations are intrinsically imatinib-resistant, as is the case with the frequently-encountered V654A mutation. However, other secondary kinase domain mutations, including those involving the activation loop N822 residue, are intrinsically imatinib-sensitive, but endow resistance when coupled with a KIT juxtamembrane region mutant, perhaps due to hyperactivation and structural changes in the KIT oncoprotein (7).

The major challenge in confronting imatinib (and sunitinib) resistance mutations clinically is the apparent heterogeneity of such mutations that can be identified amongst individual GIST patients. This clinical reality suggests that although newer generations of broad-spectrum, increasingly potent, KIT/PDGFR kinase inhibitors will benefit

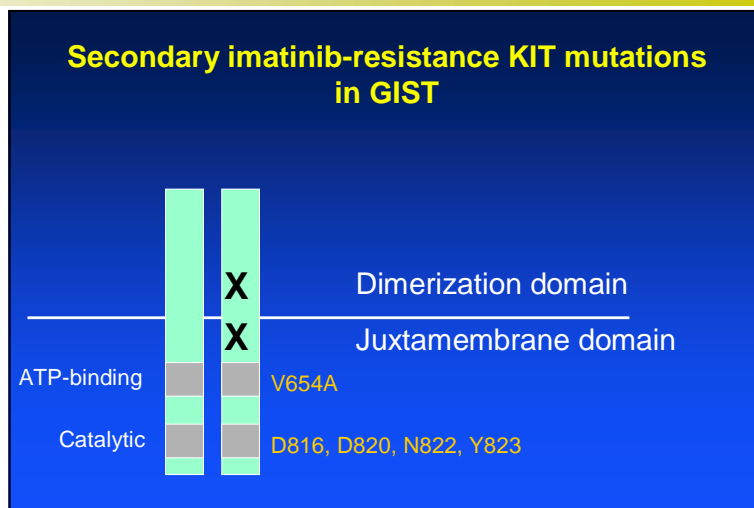


Diagram describing imatinib resistance at the molecular level.

patients progressing on imatinib therapy, such drugs – on their own – are unlikely to cure many patients with imatinib-resistant disease. Therefore, novel therapeutic paradigms are needed urgently, including those whose success is less dependent on the specific mutational mechanisms of KIT/PDGFR activation. One such approach involves inhibition of the KIT chaperone, HSP90. This strategy, in preliminary studies, was particularly effective against the hyperactivated KIT oncoproteins containing imatinib-resistance mutations (13). Clinical trials of HSP90 inhibitors have begun recently at Dana-Farber Cancer Institute, but much work undoubtedly remains to determine the most effective ways of administering these promising drugs. Another clinical strategy, in patients with imatinib-resistant GIST, might involve transcriptional repression of the KIT oncogenes, as can be accomplished experimentally using flavopiridol (14), and where the presence of imatinib-resistant mutations would appear to be irrelevant to therapeutic efficacy. Still another strategy for imatinib-resistant GIST is drug targeting of intermediate waypoints in the growth-promoting cell communication pathways regulated by KIT and PDGFRA oncoproteins. For example, the kinase pro-

ADJUVANT

From Page 2

Debiec-Rychter et al. demonstrated that exon 9 patients on high-dose have a median progression-free survival time that is almost 5 times as long as patients on low-dose Gleevec.

In the lab, one of the ways scientists use to produce Gleevec-resistant cell lines (such as the CML cell line, K562/G01) is to culture the cell line in a sub-optimal concentration of Gleevec for several months. Thus, one wonders if giving an exon 9 patient 400 mg of Gleevec when there is no visible tumor to gauge Gleevec effectiveness could lead to premature resistance.

Know your Risk of Recurrence:

Not all GIST patients are at high risk of recurrence. Patients at low risk of recurrence may never

have a recurrence or they may have a recurrence 10 or more years from now. By that time, it is likely that we will understand GIST much better and have even better drugs that we do today. Adjuvant Gleevec makes much more sense for patients with a high risk of recurrence. The ongoing adjuvant trials are for patients with high and intermediate risk.

Can we Predict Adjuvant Gleevec Benefit?

No, but in the absence of clinical trial data, we can generate some hy-

See ADJUVANT, Page 7

Defining Risk of Aggressive Behavior in GISTS

Defining Risk		
Risk	Size	Mitotic Count
Very low	<2cm	<5/50 HPF
Low	2-5cm	>5/50 HPF
Intermediate	>5cm	6-10/50 HPF
	5-10cm	<5/50 HPF
High	>5cm	>5/50 HPF
	>10cm	Any rate
	Any size	>10/50 HPF
Other High Risk Factors: Lack of clear margins, tumor rupture, small bowel may be more aggressive.		
Note: Recent papers by Meittinen may provide better risk assessment for gastric GISTS. See LRG website for additional information: http://www.liferaftgroup.org/gist_diagnosis.html		

Magic Leaves Fundraising Campaign

The Life Raft Group would like to thank those members, families and friends who responded to our annual holiday fundraising campaign this year.

The Life Raft Group provides members with supportive e-mail communities and local groups to ensure that no one has to face this crisis alone.

Our websites, newsletters and educational materials provide the leaves of knowledge to ensure that no one has to die from ignorance about the diagnosis and treatment of GIST.

Our advocacy and interventions provide the safety nets to ensure that no one has to die because of a lack of access to treatment.

And, most importantly, our research is focused upon an unprecedented coordinated strategy to find a cure for GIST.

Now, more than ever, the Life Raft Group needs your support and participation in order to continue our life-saving efforts. If you have not yet done so, please help.

You can mail your check payable to the Life Raft Group and send it to: The Life Raft Group, 40 Galesi Drive, Ste. 19, Wayne, NJ 07470. Or you can donate online at www.liferaftgroup.org/about_contribute.html.



Magic Leaves

LIFE RAFT

From Page 1

international experts and researchers. Highlights included key presentations by Dr. Daniel Vasella, Chief Executive Officer of Novartis, David Epstein, President of Novartis Oncology, Dr. Jonathan Trent of MD Anderson Cancer Center, Monica Davey of Fox Chase Cancer Center, Dr. Marie Debiec-Rychter of Catholic University

in Leuven, Belgium, Dr. Matthew van de Rijn of Stanford University Medical Center, Dr. Jonathan Fletcher of Brigham & Women's Hospital and Dana-Farber Cancer Institute, Dr. Chris Corless of Oregon Health and Science University & Portland VA Medical Center, Dr. Brian Rubin of the Cleveland Clinic and Dr. Laurie Letvak of Novartis.

• Our research team completed the first six months of a two year project, funded by the Life Raft Group, to implement a coordinated strategy aimed at finding the reasons for GIST treatment resistance and ways of overcoming them. A copy of this strategic plan, the world's first, can be found on our website at <http://www.liferaftgroup.org/research.html> and an article by our lead researcher, Dr. Jonathan Fletcher, can be found in this January 2007 Newsletter on page one.

• We completed the redesign of the Life Raft Group's internal medical database and began the process of converting our patient-driven medical data. Following our successes in evaluating Gleevec side effects and, more recently, in correlating Gleevec efficacy with actual drug dosage levels, we began planning for our 2007 analysis of adjuvant treatments, long term GIST survival and pediatric GIST.



Scientists meet at Life Fest 2006 to discuss strategic planning for GIST cancer research.

• We expanded our Science Team and our worldwide surveillance program to track new clinical trials and new drugs.

• We planned the foundation for creating pediatric GIST centers of excellence on two parallel tracks, one virtual and one physical. We are collaborating with the Texas Children's Cancer Center to provide on-site consults and ongoing care to pediatric GIST patients who can get there. On the virtual track, we have established a core group of specialists in oncology, surgery and pathology who have agreed to review cases by teleconference. We tested the concept recently by successfully arranging a transatlantic surgical consult.

• We continued to form strategic alliances with sister groups throughout the world. We maintain a key alliance with Das Lebenshaus and Association of Online Cancer Resources, with whom we coordinate the Global GIST Network.

• We continue to work behind the scenes to advocate on behalf of patients trying to access treatment, often in remote corners of the world. We occasionally find it necessary to be more confrontational in order to keep patients alive. This is an example of one such intervention:

A member of the Life Raft Group from another country reached out to us in desperation. He was resistant to Gleevec

and needed to start Sutent. The problem was that he had been waiting for several months for his medical center to begin a clinical trial that would permit him to have access to this drug.

We were asked to write a letter to the head of the hospital. This is what happened.

This is an excerpt from the letter we wrote:

Dear Dr. _____

"...(Patient's) medical condition is deteriorating rapidly as you go through your internal procedures....In other words, he is dying as you, and your staff, are working on the paperwork for this trial....The progression of life threatening illnesses like GIST may not...wait for the normal deliberative process....and may require that a responsible person intervene...I take personal responsibility for holding you accountable to that end...We shall be covering this story in our Newsletter..."

This is an excerpt from the response of the Hospital Director:

Dear Mr. Scherzer,

I received with astonishment your letter...it seems that what you are really afteris circumventing legal proce-

See LIFE RAFT, Page 9



ADJUVANT

From Page 5

potheses from what we already know:

Most likely to benefit

- High-risk patients with:
 - Exon 11 mutations
 - Exon 9 patients taking high-dose Gleevec on an adjuvant basis

Least likely to benefit

- Low-risk patients
- High-risk patients with:
 - Exon 9 mutations while taking low-dose Gleevec on an adjuvant basis
 - Non-responsive mutations
 - PDGFRA D842A, etc
 - Wild-type GIST (Note: This is more speculative than others.)

Note: Sutent has also shown good activity for exon 9 mutations in second-line therapy; however, no adjuvant trials have tested Sutent for GIST.

Recommended or not, many patients are taking adjuvant Gleevec outside of clinical trials. By understanding some of the issues regarding adjuvant Gleevec, patients and their doctors can make more informed choices about adjuvant Gleevec.

Cancer Care

Teleconference

On Tuesday, January 30 from 1:30 p.m.-2:30 p.m., Cancer-Care will be hosting a free telephone education workshop for people living with gastrointestinal stromal tumors, their families, friends and health care professionals.

The teleconference, “Treatment Update on GIST,” will include:

- Overview of GIST
- Current Standard of Care
- New Treatment Approaches
- Clinical Trials
- Pain and Symptom Management
- Communicating with Your Health Care Team
- Quality-of-Life Considerations
- Questions For Our Panel of Experts

To register, call 1-800-813-HOPE (4673) or register online at www.cancercare.org.

Surgery and Imatinib for GIST: Clinical Trials*

Trial	Description
Phase II Study of Adjuvant Imatinib Mesylate in Patients With Completely Resected High-Risk Primary GIST (ACOSOG-Z9000)	End points: survival, 2- and 5-year recurrence rates, toxicity; imatinib therapy initiated within 84 days of surgical resection, continuing for 1 year; enrollment complete (N = 110) <i>*Note: This trial is closed. The first interim analysis is expected in 2006.</i>
Phase III Randomized Study of Adjuvant Imatinib Mesylate in Patients With Resected Primary GIST (ACOSOG-Z9001)	End points: overall, recurrence-free survival; imatinib or placebo administered postoperatively for 1 year, with crossover to imatinib if recurrence; projected enrollment <i>*has been expanded from 489 patients to 732 patients.</i>
EORTC Soft Tissue and Bone Sarcoma Group (EORTC-62024) randomized phase III trial	End points: overall, recurrence-free survival; risk stratification/randomization after complete GIST resection to imatinib or no treatment for 2 years; projected enrollment = 400
Scandinavian Sarcoma Group Trial SSGXVIII	End points: recurrence-free survival, safety, overall survival; imatinib administered postoperatively for 12 or 36 months; projected enrollment = 80
Phase II Study of Neoadjuvant and Adjuvant Imatinib Mesylate in Patients With Primary or Recurrent Potentially Resectable Malignant GIST (RTOG-S0132)	End points: progression-free survival, objective response rate, safety; 8 weeks of imatinib therapy, then surgical debulking of all gross tumor and reinstitution of imatinib for 2 years; projected enrollment = 63
*Post-Marketing Clinical Study of Postoperative Adjuvant Therapy With Imatinib Mesylate in Patients With Gastrointestinal Stromal Tumors (GIST) (CNT00171977)	<i>*End points: relapse-free survival in high-risk GIST patients receiving 400 mg of Gleevec for one year, and survival for three years after surgery for their primary tumors. Location: Tokyo, Japan</i>
*Phase II Study of Neoadjuvant Imatinib Mesylate in Patients With Locally Advanced Gastrointestinal Stromal Tumor (Germany/Austria)	<i>*End points: Primary: objective response rates and histological response rates. Secondary: R0-resectability and organ-preserving resectability, correlate radiographic and metabolic imaging with response. projected enrollment = 40</i>
GIST indicates gastrointestinal stromal tumor; ACOSOG, American College of Surgeons Oncology Group; EORTC, European Organization for Research and Treatment of Cancer; RTOG, Radiation Therapy Oncology Group.	
*Clinical Management of GIST-Highlights Newsletter-Understanding the New Paradigms (Highlights from the Helsinki and Barcelona Conferences) <i>*Represents new information added after the Helsinki and Barcelona Conferences.</i> http://www.liferaftgroup.org/treat_trial_update_gleev_surgery.html	

RESISTANCE

From Page 4

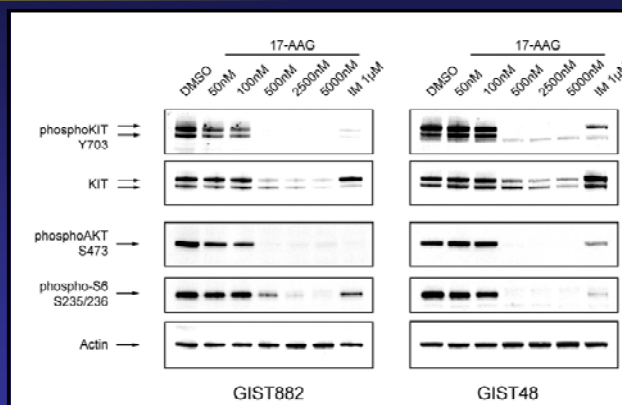
teins PI3-K and AKT seem to play crucial roles in translating KIT activation signals into GIST cell growth and survival: these “downstream” kinase proteins continue to be activated and important in GISTs that have developed imatinib and sunitinib resistance (7;15). Clinical trials of the AKT inhibitor, Perifosine, are ongoing at MD Anderson Cancer Center, and one expects that additional trials will commence once effective and selective PI3-K inhibitors – whose development is an extremely active effort at many pharmaceutical companies – are available for testing. These and other observations suggest a scenario in which patients will benefit ultimately from combinations of GIST therapies that biochemically inactivate KIT and PDGFRA (e.g. imatinib, sunitinib, nilotinib, and others), destroy KIT and PDGFRA (e.g. HSP90 inhibitors), block the production of KIT and PDGFRA (e.g. flavopiridol), and block the ability of KIT and PDGFRA to send their activating signals into the cells (e.g. AKT and PI3-K inhibitors).

In all, the complexity and heterogeneity of imatinib-resistance mutations can seem a daunting clinical challenge, but the good news is that this challenge is being met head-on by many GIST research groups and with expectations of success. New therapeutic approaches are certainly in order, and several such are already in the works, with others to follow in the next few years. Combinations of targeted therapies should ultimately serve the goal of fully shutting down KIT and PDGFRA oncogenic signaling pathways in GIST, thereby transitioning the dramatic successes of imatinib more routinely into long-term GIST control and cure.

References:

1. Demetri GD, von Mehren M, Blanke CD, Van den Abbeele AD, Eisenberg B, Roberts PJ, Heinrich MC, Tuveson DA, Singer S, Janicek M, Fletcher JA, Silverman SG, Silberman SL, Capdeville R, Kiese B, Peng B, Dimitrijevic S, Druker BJ, Corless C, Fletcher CD, and Joensuu H: Efficacy and safety of imatinib mesylate in advanced gastrointestinal stromal tumors. *N Engl J Med* 2002, 347: 472-480.
2. Verweij J, van Oosterom A, Blay JY, Judson I,

HSP90 inhibitor (17-AAG) - KIT activation & signaling



GIST882 = imatinib sensitive
GIST48 = imatinib resistant

Sebastian Bauer,
Cancer Res, in press

HSP90 inhibitors destroy KIT and PDGFRA to prevent imatinib resistance.

Rodenhuis S, van der GW, Radford J, le Cesne A, Hogendoorn PC, di Paola ED, Brown M, and Nielsen OS: Imatinib mesylate (STI-571 Glivec, Gleevec) is an active agent for gastrointestinal stromal tumours, but does not yield responses in other soft-tissue sarcomas that are unselected for a molecular target. Results from an EORTC Soft Tissue and Bone Sarcoma Group phase II study. *Eur J Cancer* 2003, 39: 2006-2011.

3. Li FP, Fletcher JA, Heinrich MC, Garber JE, Sallan SE, Curiel-Lewandrowski C, Duensing A, van de RM, Schnipper LE, and Demetri GD: Familial gastrointestinal stromal tumor syndrome: phenotypic and molecular features in a kindred. *J Clin Oncol* 2005, 23: 2735-2743.

4. Corless CL, Fletcher JA, and Heinrich MC: Biology of gastrointestinal stromal tumors. *J Clin Oncol* 2004, 22: 3813-3825

5. Heinrich MC, Rubin BP, Longley BJ, and Fletcher JA: Biology and genetic aspects of gastrointestinal stromal tumors: KIT activation and cytogenetic alterations. *Hum Pathol* 2002, 33: 484-495.

6. Demetri GD, van Oosterom AT, Garrett CR, Blackstein ME, Shah MH, Verweij J, McArthur G, Judson IR, Heinrich MC, Morgan JA, Desai J, Fletcher CD, George S, Bello CL, Huang X, Baum CM, and Casali PG: Efficacy and safety of sunitinib in patients with advanced gastrointestinal stromal tumour after failure of imatinib: a randomised controlled trial. *Lancet* 2006, 368: 1329-1338.

7. Heinrich MC, Corless CL, Blanke CD, Demetri GD, Joensuu H, Roberts PJ, Eisenberg BL, von MM, Fletcher CD, Sandau K, McDougall K, Ou WB, Chen CJ, and Fletcher JA: Molecular Correlates of Imatinib Resistance in Gastrointestinal Stromal Tumors. *J Clin Oncol* 2006.

8. Antonescu CR, Besmer P, Guo T, Arkun K, Hom G, Koryotowski B, Leversha MA, Jeffrey PD, Desantis D, Singer S, Brennan MF, Maki RG, and DeMatteo RP: Acquired resistance to imatinib in gastrointestinal stromal tumor occurs through secondary gene mutation. *Clin Cancer Res* 2005, 11: 4182-4190.

9. Wardelmann E, Thomas N, Merkelbach-Bruse

S, Pauls K, Speidel N, Buttner R, Bihl H, Leutner CC, Heinicke T, and Hohenberger P: Acquired resistance to imatinib in gastrointestinal stromal tumours caused by multiple KIT mutations. *Lancet Oncol* 2005, 6: 249-251.

10. Heinrich MC, Corless CL, Demetri GD, Blanke CD, von Mehren M, Joensuu H, McGreevey LS, Chen CJ, Van den Abbeele AD, Druker BJ, Kiese B, Eisenberg B, Roberts PJ, Singer S, Fletcher CD, Silberman S, Dimitrijevic S, and Fletcher JA: Kinase mutations and imatinib response in patients with metastatic gastrointestinal stromal tumor. *J Clin Oncol* 2003, 21: 4342-4349.

11. Debiec-Rychter M, Sciort R, Le CA, Schlemmer M, Hohenberger P, van Oosterom AT, Blay JY, Leyvraz S, Stul M, Casali PG, Zalcberg J, Verweij J, Van GM, Hagemeyer A, and Judson I: KIT mutations and dose selection for imatinib in patients with advanced gastrointestinal stromal tumours. *Eur J Cancer* 2006, 42: 1093-1103.

12. Chen LL, Trent JC, Wu EF, Fuller GN, Ramdas L, Zhang W, Raymond AK, Prieto VG, Oyedjeji CO, Hunt KK, Pollock RE, Feig BW, Hayes KJ, Choi H, Macapinlac HA, Hittelman W, Velasco MA, Patel S, Burgess MA, Benjamin RS, and Frazier ML: A missense mutation in KIT kinase domain 1 correlates with imatinib resistance in gastrointestinal stromal tumors. *Cancer Res* 2004, 64: 5913-5919.

13. Bauer S, Yu LK, Demetri GD, and Fletcher JA: Heat shock protein 90 inhibition in imatinib-resistant gastrointestinal stromal tumor. *Cancer Res* 2006, 66: 9153-9161.

14. Sambol EB, Ambrosini G, Geha RC, Kennealey PT, Decarolis P, O'Connor R, Wu YV, Motwani M, Chen JH, Schwartz GK, and Singer S: Flavopiridol targets c-KIT transcription and induces apoptosis in gastrointestinal stromal tumor cells. *Cancer Res* 2006, 66: 5858-5866.

15. Rossi F, Ehlers I, Agosti V, Socci ND, Viale A, Sommer G, Yozgat Y, Manova K, Antonescu CR, and Besmer P: Oncogenic Kit signaling and therapeutic intervention in a mouse model of gastrointestinal stromal tumor. *Proc Natl Acad Sci U S A* 2006, 103: 12843-12848.

LIFE RAFT

From Page 6

dures and trying to influence legal judgment... Furthermore, I consulted with our legal advisors and we are all in the view that your letter should it get published constitutes... slander... Our institution shall take all necessary legal measures in that event..."

This is an excerpt of an e-mail received from the patient less than 24 hours later:

" Dear Norman,

The good news reached us just now!!!! Your letter... has done it... although Dr. ___ is upset... This news was given to us today by an official of the... Cancer Association, calling from home... If you manage to move Dr. ___, I

am sure you could move the Rocky mountains to Egypt. ...May God bless you...."

Although we are proud of our accomplishments in 2006 and pleased to report on the positive state of the Life Raft Group, we are also saddened by the death of so many members and the imminent prospect of so many more.

On a personal note:

Great wars are defined by their vastness of scope and casualty such as was the case in World Wars One and Two. Although such wars are often subject to continuous debate about the moral imperatives of the combatants, they all have in common that sooner or later they end, either with one side declaring surrender or both sides, as was the case in Korea, deciding that there was nothing to gain by further combat. In either event

the survivors are often awarded medals and the dead are often buried with high ceremony and honor. In most wars, certainly the great ones, memorials are erected with care, and attended with respectful reverence on the anniversary of their cessation.

The war against cancer was formally declared by then President Nixon in 1971. It too could be defined by its vastness in scope and casualty as a Great War. But there the comparison ends. Its casualties are not tallied in daily media reports. Its heroes are not presented with medals. Its dead are not marked by memorials or commemorations. Certainly victory has not been declared and for too many will not come in time.

In a future newsletter we will discuss how the Life Raft Group's research plan to find a cure for GIST can serve as a model for curing other cancers.

Howe fought GIST courageously Lee Cousins, age 58



HOWE

Peggy Lee Howe, 60, of Boynton Beach passed away peacefully on Monday, December 11, 2006. Peggy was born on March 31, 1946. Formally of Michigan, she moved to South Florida in the early 80's. Peggy is survived by her loving daughter, Marsha Lynn Plesko and beloved grand-daughter, Jamie Lynn Plesko; 12 devoted brothers and sisters: Jack, Sandy, Kathy, Brenda, Ross, Kim, Donna, Jerry, Ronnie, Judy, Scott and Danny; and ex-husband Richard Howe. Peggy fought cancer courageously with the help of family, friends and an invaluable support group. For those wishing to make a donation to the support group in memory of Peggy, contact Life Raft Group 973-837-9093 or visit www.liferaftgroup.org. To express condolences and/or make donations, visit PalmBeach-Post.com/obituaries. *Published in The Palm Beach Post on 12/13/2006.*



COUSINS

Leonie (Lee) Anne Cousins died peacefully on Thursday, December 14, 2006 at Mount Sinai Hospital at the age of 58.

Lee is survived by her beloved sister Jane and brother John. She is the loving daughter of Janet and the late Gerald. She will sadly be missed by Don.

As expressions of sympathy, donations to the Canadian Cancer Society or the Mount Sinai Hospital Foundation would be appreciated by the family. Online condolences may be made at earlyfuneralhome.com

January 2007 clinical trial update

By **Jim Hughes**

Member of LRG Science Team

XL820 (Exelixis)

This drug inhibits c-Kit, PDGFRb and VEGFR. It is similar to the OSI-930 drug below. Data presented by Exelixis in a poster at EORTC in October 2006 showed results for 23 evaluable patients in phase I, including one GIST patient. The GIST patient had stable disease after 3.5 months on XL820. Exelixis has a phase I trial listed in the clinicaltrials.gov database to assess “the safety and tolerability of XL820 when given orally.” The listing says it is not open but we checked with one of the sites (Texas) and understand that it is now open. The sites are: The Cancer Institute of New Jersey, New Brunswick, N.J.-Mark Stein, M.D., and the Cancer Therapy and Research Center, San Antonio, Texas- Kyriakos P. Papadopoulos, M.D. This trial is open to patients with solid tumors failing standard therapy.

AZD2171 (AstraZeneca International)



This investigational drug is in early trials for a number of cancers. It inhibits KIT and VEGFR-1, VEGFR-2 and VEGFR-3. This phase II trial is being sponsored by AstraZeneca in the United Kingdom (The Royal Marsden NHS Foundation Trust in London and Christie Hospital NHS Trust in Manchester). This study deals with patients with “Histological or cytological confirmation of GIST which is resistant or intolerant to imatinib mesylate...which is refractory to standard therapies or for which no standard therapy exists,” and “will exclude patients on treatment with an investigational drug within 30 days prior to starting AZD2171 45mg, with the exception of SU11248 and imatinib mesylate which should be stopped at least 14 days before starting AZD2171.” Biologic tumor activity is evaluated by

FDG/PET response at eight days and four weeks.

OSI-930



OSI Pharmaceuticals has begun a phase I trial of the compound OSI-930 at two locations in the United States and one in Europe. The trial is for patients with advanced solid tumors, but will admit GIST patients. Locations include:

- Dana-Farber Cancer Institute- Boston, Mass. (Dr. George Demetri, Principal Investigator)
- Colorado University- Denver, Colo.
- Royal Marsden Hospital- London, UK (Dr. Michelle Scurr, Principal Investigator)

OSI-930 is a new small molecule tyrosine kinase inhibitor. It inhibits c-Kit, VEGFR and PDGFRb. The trial began in August. Up to 60 patients are expected to be accrued.

Sutent



In the United States, Canada, the United Kingdom and the European Union countries Sutent

is now approved for patients failing Gleevec or those who cannot tolerate Gleevec. In addition, Sutent continues to be available to patients via the “Treatment Use Protocol,” which is “four weeks on/two weeks off” (50 mg). There are many sites open throughout the world. Site information changes frequently; for the most current information, contact EmergingMed at 1-877-416-6248 (outside the United States) or at 1-800-620-6104 (inside the United States). If international patients have problems with the listed number, use email at: sutent@emergingmed.com.

In September Pfizer posted a new phase III trial on the NIH website. This study will compare 37.5mg daily of Sutent with 800mg daily of Gleevec for patients progressing on 400mg of



HUGHES

Gleevec. Anticipated enrollment is 212. Site information has not yet been announced. According to the listing this trial is not yet recruiting and is scheduled to start November 2006. It had not yet started when we last checked on November 17.

AMN107 + Gleevec

The combination of AMN107 and Gleevec may have a broad spectrum of activity against primary and secondary mutations in GIST. The generic name for AMN107 is nilotinib and our understanding is that the brand name will be Tasigna. The phase I trial is now closed at all sites. A phase III trial is planned. In the meanwhile, access to AMN107 is available through a compassionate use process.

IPI-504

The IPI-504 phase I trial is open for patients resistant to prior therapies and accruing patients at Dana-Farber Cancer Institute. It undergoes fairly frequent start/stop periods as cohorts accrue.

IPI-504 is an inhibitor of Heat Shock Protein 90 (HSP90) and has been the subject of articles in the November 2005 and January 2006 editions of the Life

TRIALS

From Page 10



Raft Group newsletter. This is an intravenous drug which is administered twice a week for two weeks followed by a one week off period. IPI-504 is administered without Gleevec. We understand that a second schedule of treatment without a one week off period is beginning.

Genasense + Gleevec

A phase II trial testing the combination of Genasense plus Gleevec in patients with Gleevec-resistant GIST recently opened.

Genasense (Genta Inc.) is an antisense drug that inhibits bcl-2. Bcl-2 is a protein involved in cellular survival. This drug is administered intravenously. It is hoped that Genasense may help Gleevec kill tumor cells by making them more sensitive to Gleevec.

This trial is currently open only at M.D. Anderson. Several other trial sites are planned including: Dana-Farber Cancer Institute, Boston, Mass.; University of Michigan Comprehensive Cancer

Center, Ann Arbor, Mich.; Mayo Clinic Cancer Center, Rochester, Minn.; and Memorial Sloan-Kettering Cancer Center, New York, N.Y.

Perifosine (Keryx Biopharmaceuticals)

Keryx Biopharmaceuticals has perifosine (KRX-0401), an oral drug that inhibits the AKT protein. AKT is an antiapoptosis protein. It is speculated that inhibition of AKT might enhance therapy. Apoptosis is a form of controlled cell death, a type of cellular suicide where the cell issues its own death warrant.

Perifosine + Gleevec Phase II

A phase II trial, which combines Perifosine with Gleevec, is open at M.D. Anderson Cancer Center, Houston, Texas; Oncology Specialists, Park Ridge, Ill.; and under Dr. Sant Chawla at the Cancer Center at Century City in Los Angeles, Calif. This trial is accruing



Gleevec-resistant GIST patients.

Perifosine + Sutent Phase I

This phase I trial is primarily for renal cell cancer and GIST patients. It has two parts. The first part will determine the maximum tolerable dose (MTD) in a four week “on,” two week “off,” six week cycle. The second part of the phase I trial will use the MTD to determine if a larger group of patients can remain on the drug for two six week cycles. The inclusion criteria includes the following caution:

“The physician must believe that the patient’s course and the growth rate of the tumor are such that the patient would feel comfortable continuing treatment for 12 weeks even if there is a transient period of modest tumor growth during the first weeks following the initiation of perifosine and sunitinib malate treatment.”

It is not stated that tumor growth or failure on a current treatment is a necessary condition for entry into this trial.

Patients who have received prior Sorafinib or Sutent are eligible for this

See TRIALS, Page 12



Georgia Life Raft Group

On December 6, the first meeting of the Georgia LRG Group took place at Emory University Hospital Winship Cancer Center. Dr. Michael Fanucchi, a GIST expert, was guest speaker and listened intently and answered questions of many GISTers and their family members.

Standing from left to right: Claire Davis, Anne George, Pat George, Sue Rink and Pat Lemeshka. Seated from left to right: Gary Stayer, Hollie Ontrop, Ginger Stayer and Jennie Stayer.

CLINICAL TRIALS

From Page 11

trial.

Sites currently open include: Tower Hematology and Oncology, Beverly Hills, Calif., and Oncology Specialists, Park Ridge, Ill.

RAD001 + Gleevec

RAD001 is an mTOR inhibitor. We have been informally advised that the RAD001 plus Gleevec phase II trial for GIST patients has completed accrual. We are awaiting word from Novartis on the outcome of the trial and on future plans for this drug. RAD001 is available outside the United States as Certican® for heart and kidney transplant patients. A similar mTOR inhibitor from Wyeth called Rapa-

mune® is available in the United States for kidney

transplant patients. We have received reports from GIST patients who have been prescribed Rapamune “off-label” with Gleevec.

PTK787/ZK222584

This is a phase II study being conducted at the University of Helsinki in Finland and in Milan, Italy. This trial is for patients progressing on Gleevec. PTK787 is administered without Gleevec. A seven day washout period is required.

PTK787/ ZK222584 was synthesized and developed by Novartis AG and Schering AG. It is a tyrosine kinase inhibitor and inhibits VEGF receptors as well as KIT and PDGFRB. See the July 2006 Life Raft Group newsletter for an article about this trial.

BMS-354825 (Dasatinib)

BMS-354825 is a tyrosine kinase inhibitor of Src, abl, KIT, and PDGFR.

Dasatinib is available in a phase I trial at Dana-Farber and Glasgow, Scotland. In June the Karmanos Cancer Center in Detroit, Mich. also began recruiting patients. Future plans include a SARC phase II



Bristol-Myers Squibb

trial. We will update trial sites and the scope of the trial as this information becomes available.

This trial is for patients with progression on Gleevec. The BMS drug is administered without Gleevec.

BAY 43-9006 (known as Sorafenib and by trade name Nexavar)

This drug was approved in December 2005 for kidney cancer. BAY 43-9006 inhibits several kinases including KIT, VEGFR-2, VEGFR-3, PDGFR-β, RAF, FLT3, and RET.

The phase II trial for BAY 43-9006 is open and recruiting patients. Three trial sites are open in Illinois and one in New York:

- University of Chicago- Chicago, Ill.
- Decatur Memorial Hospital- Decatur, Ill.
- Oncology/Hematology Associates of Central Illinois- Peoria, Ill.
- Memorial Sloan-Kettering Cancer Center-New York, N.Y.

Several sites are also pending.

This trial is for patients progressing on Gleevec. BAY 43-9006 is administered without Gleevec. A fourteen day washout period is required before trial drug start.



Sarcoma trials that also allow GIST patients:

The last two trials listed are sarcoma trials that allow GIST patients. There are several ways to attack GIST tumor cells with drugs. The most common method is to inhibit KIT and/or PDGFR signaling.

The protein is still present; it is just inhibited by the drug. This is the method used by Gleevec, Sutent and most of the other new inhibitors being developed (dasatinib, AMN107, etc). Another way to

target GIST is to destroy the KIT or PDGFR protein. IPI-504 targets GIST tumors in this manner.

A third way to target GIST is to try to prevent (or reduce) the formation of KIT or PDGFR proteins. The following two trials take the approach of inhibiting the formation of a large number of proteins including KIT and PDGFR.

Doxorubicin + Flavopiridol

This is a phase I trial to determine the maximum tolerated dose of the combination of doxorubicin (a traditional cytotoxic chemotherapy) with flavopiridol (an inhibitor of the cell cycle and an inhibitor of transcription). This trial is for sarcoma patients (including GIST patients) that are 18 years old or older. Patients must have a performance status of ECOG 0-2 or Karnofsky 60-100 percent. Projected accrual is 3 to 36 patients.

The trial is being conducted at Memorial Sloan-Kettering Cancer Center in New York, N.Y.

FR901228

This is a phase II trial for sarcoma patients, including GIST patients, with metastatic or unresectable disease. FR901228 (depsipeptide) belongs to a new class of chemotherapy drugs called histone deacetylase inhibitors (HDAC inhibitors). This is a class of drugs that works at a higher level within the cell acting on the genome, which is like the master control room for all of the genes in a cell.

Patients must be at least 18 and have a performance status of ECOG 0-2 or Karnofsky 60-100 percent. Projected accrual is 18 to 36 patients.

Trial locations include: Phoenix, Ariz.; Oakland, Calif.; Rome, Ga.; Decatur, Ill.; Louisville, Ky.; Columbus, Ohio; Greenville, S.C.; Spartanburg, S.C.; Danville, Va.; Burlington, N.C.; Greenville, N.C.; Goldsboro, N.C.; Winston Salem, N.C.; High Point, N.C.; Elkin, N.C.; Goldsboro, N.C.

Tran, 39, traveled across the world to find a cure for GIST

By Erin Kristoff

When Vietnam-born, four-foot-tall Thuy Tran would walk along the streets she would own the sidewalk. At least that's what Doug Gans says and what better source of information than the man who loved her for over six years. Thuy passed away on November 5 at the age of 39 in Vietnam with her mother by her side.

"[Thuy] was just the brightest, neatest, wittiest person you would ever want to meet," according to Doug. She loved

theater and music, especially John Lennon.

Thuy came to America at age twelve. She received her degree in Human Resources from Sacramento State College and was a Human Resources manager until October of last year. Her mother brought her to Vietnam to try alternative medicines after all conventional means had stopped working and she died not long after. Though Doug could not be with her, he asks only one thing, "I hope she saves me a seat next to her."



TRAN

Hospital tips: the small stuff can add up

By Louise Ladd, LRG Member, with Alison Woodman

Note: Some of this information pertains particularly to women, but anyone can benefit from reading these helpful tips.

Planning: If at all possible, schedule your surgery for early in the week. That way you should have the regular staff taking care of you during the major part of your recovery. Once the weekend comes you may find a number of new faces, plus your doctor might be off, his partner covering for him. Normally all will go smoothly but in case of problems, I find it's better to recover during the weekdays.

Also: request the first operation of the day, if possible. Your doctor and the OR team are freshest, and complications won't delay the start of surgery. The only time I accepted the second appointment of the day I had to wait 4 hours when the patients ahead of me tied up all the operating rooms. Yikes!

Before the operation:

- Stop aspirin/ibuprofen, etc. one-two weeks prior, to help control bleeding.
- Stop vitamin C and E for the same reason.

- Ask ahead for the post-op pain prescription so you can have it filled and waiting, to prevent a gap between when you leave the hospital and someone bumbles to the pharmacy.

- Delegate a friend/relative to call or email people with news about the operation, visiting info, and when you'll be released.

- Put important papers where they can be found or leave a note as to where they are.

- Do all the personal grooming that requires bending over or reaching, as it will likely be a while before you're able to this again in comfort. For instance, shave your legs, and have a pedicure if needed.

- Shampoo your hair as close to departure as possible. There is nothing worse than greasy hair when you can't wash it. Shortly before surgery have it cut or highlighted etc. because you won't feel up to dealing with such procedures for some weeks. Some who wear their hair short prefer to have it trimmed extra close, as it means less to deal with during recovery.

- If you are a having bowel clean-out, get some Gatorade or Pedialite (not red) to drink. It replaces potassium which is lost in the process. Hemorrhoid ointment (better than cream) helps if delicate ar-

eas are irritated.

- If you are able to manage it, do any housework or chores that require bending or stretching up, trying to anticipate future needs for a month or two. For instance, take down a few vases from high storage, as you may have flowers to put in them if friends don't send pre-made arrangements. People don't realize that arranging flowers in a post-op condition is not a pleasant chore.

- In sum, put anything you usually need where you can easily reach it when you get home.

- Before you leave for the hospital, put clean sheets on the bed, or arrange for a friend to do so. Nothing beats coming home to your own bed with fresh sheets. Same with towels. Put out your thickest, most luxurious, and forbid anyone else to touch them.

- Stock up on essentials, of course. You'll probably have people to run errands, but some things you want to do for yourself, such as choosing products that you're particular about. Make sure you have enough on hand so you don't have someone shopping for you and bringing home a disappointment.

Suggestions on what to take in your purse and toiletries bag (in random order):

CHECKLIST

From Page 13

- *Notepad and several pens
- *Glasses and case
- *Phone numbers or your address book.
- *Cell phone or phone card. Hospital phones sometimes allow only local calls. Note: cell phones don't work in certain hospitals.
- *Earplugs
- *Mask for eyes
- *Nail scissors/file
- *Skin cream/lotion
- *Hairbrush/comb
- *Watch (leave all expensive jewelry at home)
- *Small mirror
- *Mini-flashlight
- *Length of string
- *Heavy socks. Feet can get cold walking around in halls. (Hospitals sometimes provide socks, but not all do.)
- *Your own pillow, and maybe your own sheets (see below).
- *Nightgown, robe and slippers
- *Comfortable clothes that you can easily get into for the return trip. Slip-on shoes, loose-hanging shirt/pants/dress, etc.
- * Small supply of any necessary daily medications (see below).
- *Your house key, so if a friend takes you home you can get in!
- *A good book
- *Perhaps a little radio that you can tuck in the night table drawer in case you want to listen and not watch TV. CD players may disappear.

Some of these items might be unnecessary, but the mirror can help you see around your bed space if you drop something, or check areas you can't see with the fixed mirrors in bath and bedtable. The string can tie objects to the bed so you can retrieve them, and the flashlight will help you see without waking a roommate.

Usually you can take your own pillow to the hospital with you. If your skin is ultra-sensitive like mine, you might want your own sheets. Sometimes the hospital sheets are lovely and worn and soft; sometimes they feel like sandpaper.

Living in those hospital johnnies

makes you feel (and look) more like a patient, not a person. Take a soft, pretty nightgown with short sleeves that don't interfere with IVs, spring or summer-weight because most hospitals are very warm and dry (Some hospitals don't allow them.). Pack a non-bulky robe for walking the halls, and slip-on but secure slippers. A bed jacket is nice, if you have one, or a light sweater or shirt can substitute.

Important: The instant you think of a question for the doctor, write it down immediately on your notepad. Amazing how these important questions slip away when faced with a surprise 6 a.m. visit. Doctors always seem to arrive when you least expect them, and they don't stay long, so grab your list of questions and ask them quickly, but don't settle for incomplete answers. One question I've recently added to my list: "Doctor __, what questions haven't I asked that I should be asking?" I try to rewrite my list at the end of the day, placing the most urgent questions first. A friend/caretaker can help with this, if needed.

Take along small doses of any medications you normally use. The hospital staff should have orders to give you the meds you require, but if orders get messed up, the busy doctor must authorize anything that has been missed. Better to take your own, in case, rather than waiting a day or two for them to get around to making arrangements.

I keep my purse or toiletries bag in the bed with me, tucking it under the covers or using it to plump up a pillow. That way you always have your most essential valuables—notepad and pen, glasses, nail scissors (which can also cut tape, string, paper, etc.)—your vital needs—where you can reach them without a stretch or fuss.

This is vital! Do not allow anyone to move your nightstand or bedtable with the phone, your cup—whatever important is on it—without putting it back where you can easily reach it. This is the most valuable piece of advice my

mother gave me, as a veteran of surgery herself. And she was so right. Six inches can be a chasm you can't cross when the phone rings, or you need whatever you've stored in the table. Draculas arrive to suck your blood with needles, nurses fuss over IVs, room cleaners come through, and they all shove the table out of their way, then leave, and you're stuck. No matter how sleepy you are, ask them (nicely) to replace the table.

Nice is the key word when dealing with nurses, and all the staff. If they like you, you might get better attention. And if you only buzz them when you really need help, they'll appreciate it. I'm sure you know this, but sometimes it's hard to apply when dealing with difficult people, or you're feeling awful. Be polite and you'll come out ahead. If they see you understand their needs and respect the demands on their time, they might come to you before answering some else's buzzer. I also try to learn their names, if possible.

One trick I've never used, but has been recommended, is to ask people to bring you big tins of cookies or candies to share with the staff. They're often overworked and don't have time to eat properly. If they're hungry, your room will be a magnet.

Try to arrange to have a family member or friend with you as much as possible. They can fetch more ice or juice, open or close the blinds, add or take away blankets, chores that spare the busy staff a lot of small stuff that makes a big difference to you, but is a burden to them. More importantly, if they are trained to be your advocate, they can make sure you get the right meds, on time, and oversee your care in many ways so you can lie back and relax, go with the flow, and not struggle to stay awake and alert when all your body wants is rest and sleep. This is another bit of advice I wish I'd taken. I really needed this sort of help after the last operation, but was so used to being in control I paid a price for it.

In Summary:

We hope you find this helpful. Sometimes it's the small stuff that can make a big difference.

THE LIFE RAFT GROUP

Life Raft staff

Executive Director	Norman Scherzer	nscherzer@liferaftgroup.org
Executive Assistant	Tricia McAleer	tmcaleer@liferaftgroup.org
Administrative Assistant	Erin Kristoff	ekristoff@liferaftgroup.org
Program Coordinator	Sara Rothschild	srothschild@liferaftgroup.org
Research Coordinator	Elizabeth Braun	ebraun@liferaftgroup.org
Research Assistant	Pamela Barckett	pbarckett@liferaftgroup.org
Science Coordinator	Jerry Call	Jerry.Call@comcast.net

Contact the Life Raft Group

40 Galesi Drive
Wayne, NJ 07470
Phone: 973-837-9092
Fax: 973-837-9095
Internet: www.liferaftgroup.org
E-mail: liferaft@liferaftgroup.org

Life Raft volunteers

General Counsel	Thomas Overley	guitarman335@msn.com
Accountant	Kristi Rosenberg	kristi@mackeycpas.com
Accounting Firm	Mackey & Mackey	calvin@mackeycpas.com
Database Consultant	Steven Rigg	StevenRigg@aol.com
List Manager	Mia Byrne	mebmcb@wowway.com
Newsletter Editor	Sara Rothschild	srothschild@liferaftgroup.org
Newsletter Editor Emeritus	Richard Palmer	richardpalmer@hawaii.rr.com
Web Designer	Tami Margolis	tami@comcast.net
Fund-raising co-chairs	John Poss	John@PossHaus.com
	& Gerald Knapp	gsknapp@winfirst.com
Science Team	Jim Hughes	tjhughes43@comcast.net
	David Josephy	djosephy@uoguelph.ca
	Michael Josephy	mjosephy@gmail.com
	Antonio Ramos	ramos.antonio@inbox.com
	Richard Singleton	dick@garlic.com
	Rick Ware	rwkathie1@aol.com
	Glenn Wishon	gwishon@earthlink.net

Life Raft regional chapters

Alabama	Sharon McCall	sharonm@snowhill.com
	Pat George	patgeorge@bham.rr.com
Arizona	Linda Martinez	linda.martinez1@cox.net
Illinois	Richard Kinzig	rjkinz@aol.com
Colorado	Jerry Call	Jerry.Call@comcast.net
Connecticut	Anita Getler	aquarius2550@comcast.net
California	Floyd Pothoven	floyd@keralum.com
	Martha Zielinski	3zielinski.ca@att.net
Georgia	Pat Lemeshka	riyank@bellsouth.net
Maryland	John Murphy	jdmurphyjr@aol.com
Massachusetts	Janice Leary	jleary@orr.mec.edu
Michigan	Ellen Rosenthal	ebrosenthal@comcast.net
New Jersey	Amy Spires	amylspires@hotmail.com
New York	Dan Cunningham	Daniel.Cunningham2@pseg.com
Ohio	Kaye Thompson	tnt.1@sbcglobal.net
Texas	Kerry Hammett	yaloo@gvtc.com
Washington	Deanne Snodgrass	g-d-snodgrass@comcast.NET
Wisconsin	Rick Ware	rkwelwood@yahoo.com

Board of Directors

Executive Committee

Stan Bunn , President	SBunn@BSTGlobal.com
Jerry Cudzil , Secretary-Treasurer	Jerry.Cudzil@DACFunds.com
John Poss , Fund-raising	John@PossHaus.com

Directors

Robert Book	RMBook2@aol.com
Mia Byrne	mebmcb@wowway.com

Chris Carley	ccarley@fordhamco.com
Jim Hughes	tjhughes43@comcast.net
Gerry Knapp	gsknapp@winfirst.com
Dr. Arnold Kwart	amkbmp@aol.com
Ray Montague	rmontague@avalonexhibits.com
Rodrigo Salas	rsalas@maprex.com.mx
Silvia Steinhilber	nswplas@mb.sympatico.ca

Life Raft country liaisons

Australia	Katharine Kimball	katharine_kimball@hotmail.com	Kenya	Francis Kariuki	bridgestone@coopkenya.com
Bolivia	Virginia Ossio	vossiop@accelerate.com	Malaysia	Yong Choo Sian	ycspj2005@yahoo.com
Brazil	Vanessa Passos	vanessa@endo.med.br	Mexico	Rodrigo Salas	rsalas@maprex.com.mx
Canada	David Josephy	djosephy@uoguelph.ca	Netherlands	Ton de Keijser	tdk@liferaftgroup.nl
China	Ruijia Mu	mu_ruijia@yahoo.com	Norway	Jan Einar Moe	jeinmoe@online.no
Colombia	Jaime Peralta	peraltas@cable.net.co	Poland	Stan Kulisz	listy@gist.pl
Costa Rica	Michael Josephy	mjosephy@gmail.com	Romania	Simona Ene	si_mi_ene@yahoo.com
France	Estelle LeCointe	gist.estelle@laposte.net	Russia	Tanya Soldak	tsoldak@citihope.org
Germany	Markus Wartenberg	wartenberg@lebenshauspost.org	Singapore	Yong Choo Sian	ycspj2005@yahoo.com
Iran	Negar Amirfarhad	negaraf@sympatico.ca	Switzerland	Ulrich Schnorf	ulrich.schnorf@bluewin.ch
Ireland	Carol Jones	roycal-re-gist@hotmail.com	Turkey	Haver Tanbay	tanbay@tanbay.net
Israel	Ben Shtang	ehuds@merkavim.co.il	U.K.	David Cook	D.Cook@sheffield.ac.uk
Italy	Anna Costato	anna.costato@virgilio.it			

Learn more about the Global GIST Network: www.globalgist.org