

the  
**LIGHT  
PIPE**

IN THIS ISSUE:

**2010**  
The Year  
in Review

*Our New EMR System* pg. 4

*Emerging Treatments  
for Non-Exudative (Dry)  
Age-Related Macular  
Degeneration* pg. 8

*Staff Spotlight:  
J.A. (Jack) Davidson* pg. 6



THE NEWSLETTER OF

**GEORGIA**  **RETINA** P.C.

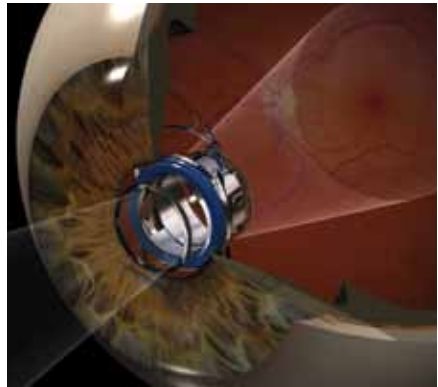
*The field of vitreoretinal disease and surgery has seen tremendous growth and innovation in recent years. 2010 was an especially great year for the advancement of treatments for vitreoretinal diseases.*

RETINA

2010

# The Year in Review

A new implantable intraocular telescope is now available for patients with endstage macular degeneration. Patients with severe, bilateral, loss of central vision caused by macular degeneration may now benefit from this tiny visual prosthesis (vide infra). The company, VisionCare, received FDA approval for CentraSight in July 2010.

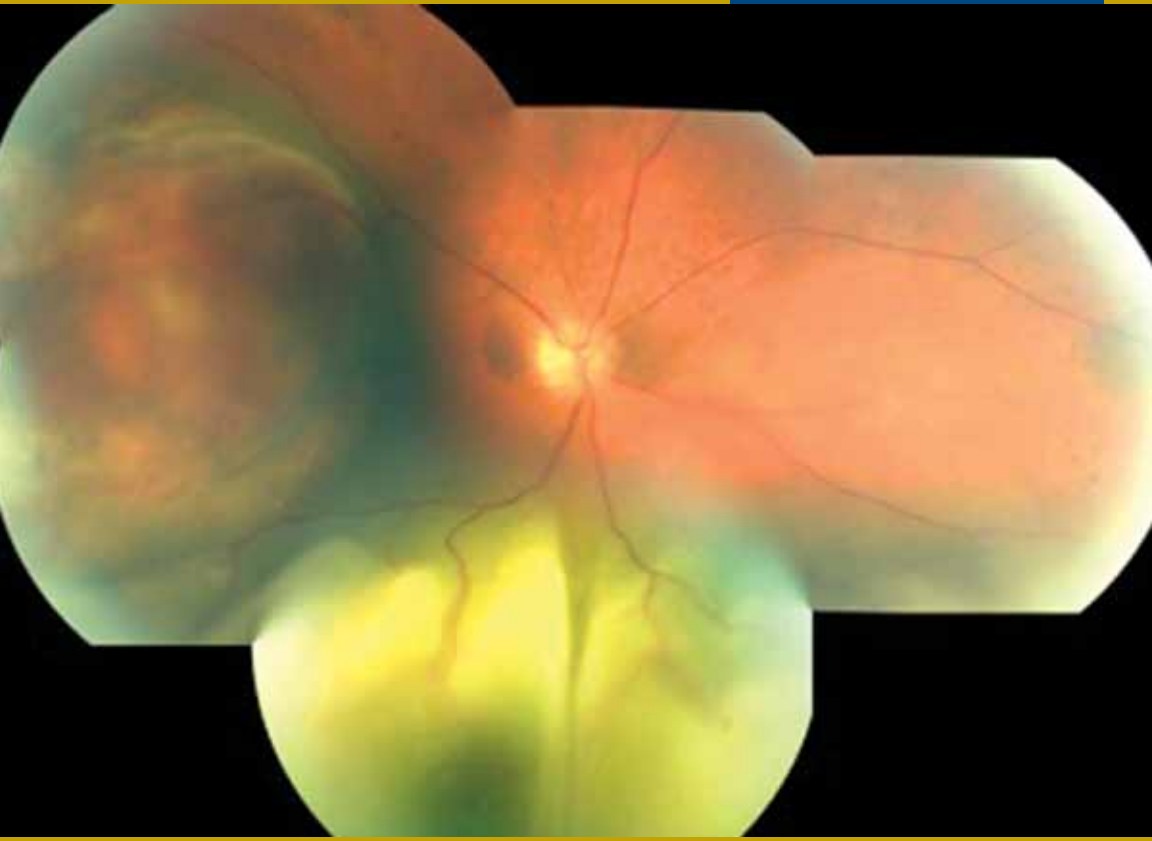


Well, how does it work? The CentraSight implantable telescope is designed to be placed only inside the eye. This “telescope,” a very strong intraocular lens, magnifies the central vision and projects an image onto a larger corresponding area of the retina. The operative eye (the eye receiving the implant) is thus meant for central vision. The other eye (not receiving the implant, but with lousy central vision) will remain the same, but will offer peripheral vision. Thus, there is one eye for central and the other for peripheral vision. We should be watchful for more news as it develops and mindful that this is brand new.

Avastin and Lucentis continue to be the mainstays of treatment for wet macular degeneration. There is evidence that the two drugs are similar in clinical efficacy. This is a notion I support, but the final answer will hopefully be brought forth by the results of

the CATT trial by mid-2011. Furthermore, exactly how often to administer these drugs for wet-AMD patients is still up in the air. Results from other clinical trials (PIER and PrONTO) offer suggestions on the frequency and duration of treatment, but there is still great variability in the overall treatment paradigm. Another strategy to maximize acuity and minimize injection frequency is the “treat and extend” method. This method attempts to avoid anatomic changes for as long as possible while sequentially increasing the length of time between intravitreal injections. For example, patients receive monthly injections until resolution of fluid, followed by injections every 5 weeks, then 6 weeks, and so on until fluid reaccumulates between injections. If a patient then develops a recognizable pattern of relapse, retreatment can be individualized to his or her

*continued on page 7*



## What's your diagnosis?

54-year-old healthy female with presented with painless decreased vision for six weeks. She had symptoms of flashes or floaters. Vision on presentation was count fingers in the right eye and 20/20 in the left eye. She did have an afferent papillary defect in the right eye. Intraocular pressures and slit-lamp examination were normal bilaterally. Photograph of the right fundus above. Left fundus was within normal limits.

*Photo Quiz Answer on page 6*

## ELECTRONIC MEDICAL RECORDS

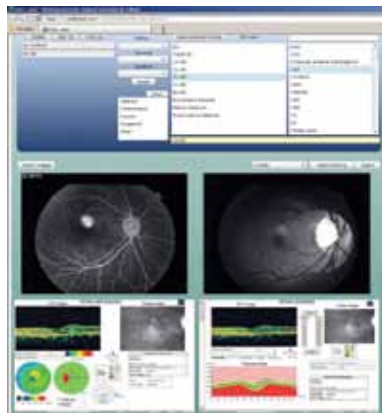
# *It's Time for Change!*

*Electronic medical record (EMR) systems are becoming more common in medicine. Between 2001 and 2006 the use of EMRs rose by 60% to include nearly 30% of physician practices. CMS essentially is mandating the use of these systems by 2014.*

Our nine doctor, seven office retina practice was quite efficient, but suffered from many of the typical problems of paper charts in a multi-office practice. Patients were often seen in different offices, and although we would try to transport the paper charts to the proper office, this often led to misfiled or lost charts. Photographic images stored in one office were not accessible in other offices. Patients calling after office hours with an urgent problem were often seen without a chart, making care difficult. Clinical research required an enormous expenditure of time to pull and manually review charts one by one. Pulling and photocopying charts for audits or disputed insurance claims was time consuming and expensive.

Clearly, the solution to our problems was a combined electronic medical record and practice management software system. Nevertheless, we had been reluctant to embrace EMR for many reasons. Much of the way the examination is recorded is via drawings and photographs, items that were difficult to capture and store with older technology. During the past several years, however, advances in computer speed and storage media, along with other technical advances such as digital cameras, have moved the EMR closer to fulfilling the broad needs of the ophthalmology practice.

Over the last few years, Georgia Retina has been searching for an EMR system that would enable us to meet the following goals:





- 1) *To reduce data capture time from diagnostic screening devices;*
- 2) *To create accurate, paperless documentation;*
- 3) *To enhance coding levels;*
- 4) *To generate legible medication prescriptions electronically;*
- 5) *To dramatically reduce time and cost spent on dictation and transcription;*
- 6) *To provide the referring doctors with retina reports instantaneously;*
- 7) *To increase staff's ability to react to new orders and plans;*
- 8) *To integrate various diagnostic test results in a single system;*
- 9) *To access records online.*

After numerous on-line/in-person demos and on-site visits, we have decided to install an EMR system called MDIntelSys. It distinguishes itself in providing a web based EMR solution for Ophthalmology. It is also

unique in that it offers an on-line, shared knowledge base that we as a provider can not only use in our practice, but also contribute findings to keeping the retina community of users always up to date with the latest information. This web-based approach also provides us with the knowledge already in the system, so we can start using the system right away without lengthy delays customizing a client/server solution. Furthermore, we are no longer required to purchase and maintain a server, and only need a web browser on a PC or Mac to securely access the patient data anywhere we have access to the Internet.

We believe this will enable us to convert to an EMR system without adversely impacting our productivity and should actually improve our productivity. We feel that this solution best fits our practice needs and will contribute to better patient care and allow more time to communicate with our patients and referring doctors. We expect to have the initial installation at our Cumming location this summer, and hopefully at other locations by the end of this year. 🌐

## Physician Spotlight

# John Andrew Davidson, M.D.

John Andrew Davidson (Jack to all who know him) came to Atlanta in 1968 and started his retina practice. He became successful quickly because of his excellent training, abilities, and friendly demeanor. During his 42 years in practice he took care of thousands of patients, improving their lives with his skills. He had and used the first laser in the South, and was one of the first vitrectomy surgeons. He gave advice freely to young doctors who were starting in practice, and was instrumental in the formation of Metropolitan Eye and Ear Hospital.

Now that Jack has decided to hang up the indirect for good, we at Georgia Retina would like to wish him a long and healthy retirement. We are very pleased that he has asked us to continue the care of his patients.

Thanks, Jack, for your years of providing excellent care to the community.

## REMINDER: Please check your fax machine!

Georgia Retina is moving forward toward electronic medical records. In preparation for our move into the realm of EMR and in order to ultimately be green and save some trees, you will now be receiving your correspondence from us via fax. It is important for you to know this for two reasons. Firstly, you may be looking through your snail mail to hear back from us about a patient you are concerned about, when in reality, it is actually sitting on your fax machine. Secondly, we believe that we have almost all the fax numbers of the doctors who refer to us; however, if your fax number changes, please make sure to contact us immediately. Perhaps in the distant future, instead of sending our correspondence via fax, we will be able to send it with email; but as you know, at this time, email would be a violation of the HIPPA requirements because its level of security cannot be assured. Please do not hesitate to call one of our offices if you have any questions in this regard or if you are having trouble receiving these faxes

## PHOTO QUIZ ANSWER

Diagnosis: Choroidal Melanoma with exudative retinal detachment OD.

schedule. Looking forward, it is likely that these types of drugs will be delivered with a sustained release system, thus obviating the need for repeated intraocular injections on a monthly basis.

Speaking of sustained release medications, Ozurdex® (dexamethasone implant, Allergan, Inc.) is now indicated for the treatment of non-infectious uveitis affecting the posterior segment of the eye. This approval was based on data from a 26-week, multicenter, double-masked, randomized clinical study. Ozurdex was originally FDA approved for the treatment of macular edema from RVO (BRVO and CRVO) but is now being widely used in the pharmacologic armamentarium to help prevent vision loss secondary to RVO and non-infectious uveitis.

Iluvien™ is another sustained drug delivery system that is also injected into the eye. Similar to Ozurdex, Iluvien will release steroids into the eye, in this case for a duration of up to three years. Alimera Sciences anticipates that this drug delivery system will be approved for treating diabetic macular edema, a very common malady that affects those with diabetic retinopathy. Iluvien (fluocinolone acetate intravitreal insert) is likely to be

the second FDA approved intraocular drug delivery system. Data from almost 1,000 patients were included in the FDA submission. If you remember, Alimera Sciences received a “Priority Review” from the FDA when the application was filed last summer. A “Priority Review” accelerates this last leg of the FDA approval process. Instead, the FDA is asking for additional safety/efficacy information covering 36 months after treatment instead of the 24 months provided. When speaking of diabetic retinopathy, mention to accomplishments of the Diabetic Retinopathy Clinical Research Network (DRCRnet) must be made. Georgia Retina joined the DRCRnet in February 2010. The DRCRnet is a collaborative network to facilitate multicenter clinical research on diabetic retinopathy, diabetic macular edema, and associated conditions. It involves community-based practices as well as academic centers. In 2010, the network presented primary results of Protocol I which found that ranibizumab (with prompt or deferred focal/grid laser) resulted in superior visual acuity outcomes compared with laser alone through two years. It also began Protocol N (Georgia Retina is enrolling patients in this protocol) which is evaluating the use of intravitreal ranibizumab for vitreous hemorrhage due to proliferative diabetic retinopathy. The DRCRnet also received a

*continued on page 10*



Photo: Allergan, Inc.

# Non-Exudative (*dry*) Age-Related Macular Degeneration

Most of the research performed in Age-Related Macular Degeneration (AMD) has focused on the exudative (wet) form of the disease. The exudative form of AMD affects 15% of all AMD patients and can be visually debilitating. Since the advent of focal laser therapy for choroidal neovascular membranes in the 1980s (the Macular Photocoagulation Study), there have been a slew of newer treatments over the last decade that have revolutionized the way retinal specialists treat exudative AMD. Focal laser therapy has yielded to photodynamic therapy (PDT); furthermore, intravitreal anti-VEGF therapy is now the main player in the armamentarium to fight exudative AMD. The anti-vascular endothelial growth factor (VEGF) inhibitors (Macugen, Lucentis and Avastin) are treatments that have been shown to be superior to thermal laser and PDT and are currently the treatments of choice for exudative AMD in 2011.

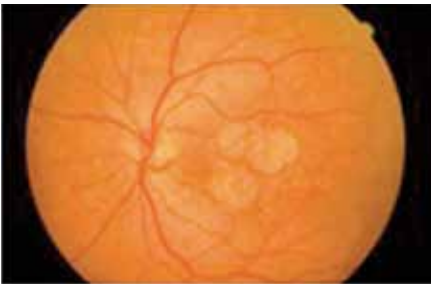


Figure 1: Color fundus photograph of the left eye showing geographic atrophy involving the foveal center (advanced AMD).

There is now tremendous interest from both the NIH and industry in funneling research dollars into treatments that could benefit

dry AMD patients. Developing atrophy that involves the foveal center is the most dreaded aspect of this disease. Most patients with AMD have the non-exudative form and have had limited options to treat the disease. The Age-Related Eye Disease Study (AREDS) was an NIH sponsored trial that showed a reduced risk of progression to advanced AMD (central GA or choroidal neovascularization) in patients with dry AMD who take vitamins with the following concentrations: 15mg beta carotene, 400 IU vitamin E, 500mg of vitamin C, 80mg zinc oxide, and 2mg copper). The NIH has completed enrolling of AREDS II and will examine the benefits of taking lutein, zeaxanthin, omega 3 fatty acids, and decreasing the amount of beta carotene and zinc required in dry AMD patients.

Novel treatment strategies underway include developing drugs that can stop or slow down photoreceptor cell death. If this can be achieved, central vision may be preserved as less photoreceptors will die, leading to less progressive atrophy. NT-501 is a platform that produces a ciliary neurotrophic factor that may slow apoptosis. Phase 2 studies have been extremely promising for this exciting new drug that is still being examined further.

Inflammation is also an important process that leads to the recruitment of white blood cells that eventually form membrane attack complexes that destroy cell membranes. The activation of the complement system

is an integral part of inflammation and the recruitment of white blood cells. Studies have shown that drusen contain complement deposits. Soliris is an intravenous monoclonal antibody to complement factor 5, an important factor that can prevent the formation of the membrane attack complex. This drug has also shown promise with regression of drusen noted in small trials. It is currently undergoing larger clinical trials.

Interest has developed in photoreceptor cell visual cycle modulation. The theory behind this stems from inhibiting toxic byproducts, such

as lipofuscin and retinal fluorophore A3E, from accumulating in the retina. If this is found to be successful, then photoreceptor cell death and subsequent geographic atrophy can be prevented. Studies are currently underway to test this hypothesis.

The eye professional community is excited at the possibility of treating patients with dry AMD with several potential new drugs that may become available over the next few years. Patients with dry AMD have much to look forward to with these promising treatments that are currently in the pipeline. 🌐

# Announcing our newest office in Peachtree City!



The physicians of Georgia Retina look forward to welcoming you to the new Peachtree City office. We're proud to expand our reach across the state, as well as the great care and patient service that you've come to expect.

*Appointments are available!*

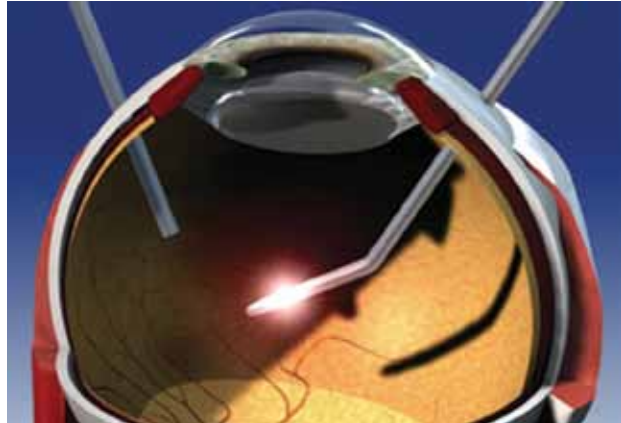
*8:30 a.m. to 3:30 p.m. on Tuesdays*

*and every other Friday, beginning March 18.*

**GEORGIA**  **RETINA**

403 Westpark Court, Suite 110  
Peachtree City, GA 30269 | (770) 486-1633

*The spectrum of treatable retinal disease is likely to expand significantly in the coming decade, with enormous public health impact.*



grant from the JDRF for initiation of a genetics initiative. The DRCRnet is truly unique and Georgia Retina is proud to be an active member participating in related clinical trials.

Three ongoing clinical trials— MERLOT, MERITAGE, and CABERNET—are testing epimacular brachytherapy in patients with neovascular AMD. Epimacular brachytherapy is designed to allow intraocular, epimacular, focal delivery of radiation to the CNV lesion while minimizing the amount of radiation delivered to surrounding structures and the healthy retina. Preliminary observations of MERITAGE suggest that a single procedure of epimacular brachytherapy reduced patients' need for ongoing anti-vascular endothelial growth factor (anti-VEGF) therapy, indicating that such therapy may potentially reduce the burden of treatment in these resource-intensive patients while maintaining good visual outcomes. Additionally, 63% of patients showed some improvement in visual acuity, with 50% gaining at least five letters at six months. The 12-month results of CABERNET are expected to be available some time this year. Currently, this therapy is not approved by the US Food and Drug Administration for use in humans in the United States. Results of such large clinical trials, as well as outcomes following approval, will be important to determine what long-term

effects may exist with these novel radiation delivery systems for patients with AMD.

In summary, based on recent advances in ongoing vitreoretinal research, the spectrum of treatable retinal disease is likely to expand significantly in the coming decade, with enormous public health impact, as well as significant changes in the practice patterns of retina specialists worldwide. Additionally, pharmacologic vitreolysis may greatly impact the current approach to treatment of various vitreoretinopathies. New methods of drug delivery to the posterior segment, either via nanoparticles or sustained-release intravitreal implants, may supplant repetitive intravitreal injections. Gene therapy may become more common as the genetic basis of inherited retinal diseases is further elucidated. Stem-cell transplantation and the implantation of artificial retinal prostheses offer promise for long-term sight restoration. We know potentially effective therapies for many posterior segment pathologies are in the pipeline, so we must be patient. Remember that good things come to those who wait. But also remember that patience is not passive, and Georgia Retina must endeavor in the meantime to care for our patients the best we can with the tools we currently have available.

—Dr. Robert Stoltz ●

THE PHYSICIANS OF GEORGIA RETINA INVITE YOU TO ATTEND THEIR

## Ask the Expert Session & Seminar:

# Diabetes Prevention & Management

Diabetes EXPO | April 9 | Georgia World Congress Center

Georgia Retina, the state's largest retina-only private practice, will offer seminars on diabetic retinopathy and Ask the Expert sessions at the American Diabetes Association EXPO Atlanta on Saturday, April 9, at the Georgia World Congress Center.

Ophthalmologist Robert A. Stoltz, M.D. Ph.D., one of nine board-certified retina specialists at Georgia Retina, stressed the importance of regular eye care for all patients with diabetes.

"All people with diabetes—both type 1 and type 2—are at risk of diabetic retinopathy," he said. "That's why everyone with diabetes should get a comprehensive dilated eye exam at least once a year. The longer someone has diabetes, the more likely he or she will get diabetic retinopathy."


Diabetic retinopathy is the most common cause of blindness in men and women between 24 and 70 years of age. Between 40% and 45% of Americans diagnosed with diabetes have some stage of diabetic retinopathy.

"If you have diabetic retinopathy, your doctor can recommend treatment to help prevent its progression," Dr. Stoltz said.

Dr. Stoltz will lead both a morning and afternoon session on diabetic retinopathy and Georgia Retina will host Ask The Expert sessions at their exhibit area.

Georgia Retina is a private physician practice group that was founded in 1995 by the merging of two retina-only medical practices, and since has become one of the largest retina-only medical practice in the Southeastern United States.

Georgia Retina focuses their care specifically on conditions of the retina, macula, and vitreous, making them experts in addressing retina disorders. The practice's retina specialists have the training and experience to provide their patients with state-of-the-art treatment.

At Georgia Retina, patients' vision needs are the top priority. As one of the largest retina-only medical practices in the Southeastern United States, Georgia Retina specializes in treating diseases of the retina, macula, and vitreous. Its nine board-certified ophthalmologists have received special Fellowship training in vitreo-retinal diseases and surgery, and are engaged in clinical trials with the goal of advancing research into retinal diseases. 

**The EXPO will be in Building C, Hall C-4, 9 a.m. to 4 p.m.**

For more information, including free registration and a \$4 parking coupon, call 1-888-342-2383 x3166, or visit [diabetes.org/EXPO Atlanta](http://diabetes.org/EXPO Atlanta).

# Participating Insurance Plans:

Aetna U.S. Healthcare  
BCBS of Georgia  
Beech Street  
Blue Choice  
CCN PPO  
Choice Care Network  
Cigna  
Coventry Healthcare  
Evolutions Healthcare System  
First Health  
Great-West  
Humana  
Medicaid  
- Peach State Medicaid  
- Wellcare Medicaid  
- Amerigroup Medicaid

Medical Resource Network  
Medicare  
Medicare Railroad  
Multiplan PPO  
National Preferred Provider  
Network  
Novanet  
Private HealthCare Systems  
Southcare PPO  
TriCare PPO, HMO  
State Health  
United Healthcare  
USA Managed Care Organization  
WellCare Medicare HMO

Other plans are pending; please call to check specific participation.

**(770) 907-9400**

Disclaimer: No contract, representations or promises are made, given or intended by any materials, information, and/or suggestions contained in this newsletter. The authors and publisher make no representations or warranties with respect to any treatment or action relied upon or followed by any person receiving information presented without warranty of any kind. In addition, neither our Practice nor any individual associated or affiliated with our Practice endorses or recommends any specific medical service, clinical study, medical treatment or commercial product. All text, copy, graphics, design, and other works are the copyrighted works of Georgia Retina, P.C. All rights reserved. Any redistribution or reproduction of any materials herein is strictly prohibited.

**Our Physicians:** Michael S. Jacobson, M.D. | Scott Lampert, M.D. | Mark J. Rivellese, M.D.  
Jay B. Stallman, M.D. | Sean S. Koh, M.D. | Atul Sharma, M.D. | Robert A. Stoltz, M.D. | John J. Miller, M.D.  
Stephanie L. Vanderveidt, M.D.

465 Winn Way, Ste. 100  
Decatur, GA 30030  
(404) 299-5209

1100 Johnson Ferry Rd.  
Bldg. 2, Ste. 593  
Sandy Springs, GA 30342  
(404) 255-9096

575 Professional Dr., Ste. 330  
Lawrenceville, GA 30045  
(678) 405-0922

960 Sanders Road, Ste. 500  
Cumming, GA 30041  
(678) 679-4830

114 Cherry St., Ste. F  
Marietta, GA 30060  
(770) 218-1888

155 Medical Way, Ste. E  
Riverdale, GA 30274  
(770) 907-9400

6095 Professional Pkwy.,  
Ste. B202  
Douglasville, GA 30134  
(678) 303-0136

403 Westpark Ct., Ste. 110  
Peachtree City, GA 30269  
(770) 486-1633



PRSR STD  
US POSTAGE PD  
CUMMING, GA  
PERMIT 107