DATE: February 8, 2013

SUBJECT: CURRENT ENROLLING CLINICAL STUDIES FOR WEB SITES

Enrolling Clinical Studies being conducted at the Department of Ophthalmology, ACC Building, Suite 2400

Glaucoma

1. Title: Primary Tube Versus Trabeculectomy (PTVT) Study
   PI: James D. Brandt, M.D.
   Protocol #: 244666
   Sponsor: Department of Ophthalmology in collabaoration with Bascom Palmer Eye Institute
   Purpose: The purpose of this study is to determine if a trabeculectomy with mitomycin C or Baerveldt implant surgery works better with fewer complications. The ancillary endothelial study will compare the rates of loss of endothelial cells in the two randomized groups of this study.
   Indication: Patients between the ages of 18 and 85 with inadequately controlled glaucoma undergoing their first incisional ocular surgery
   Coordinator: Ember Dhillon, CRC, 734-6422

2. Title: Baerveldt Plate Area Comparison (BPAC)
   PI: James D. Brandt, MD
   Protocol #: 271065
   Sponsor: Department of Ophthalmology in collaboration with Johns Hopkins Hospital and Glaucoma Research Network
   Purpose: The objective of this study is to compare the safety and efficacy of the 250 mm^2 and 350 mm^2 Baerveldt glaucoma implants in subjects who have had previous ocular surgery. Outcome discrimination between the two treatment groups will be made using measures of visual function (visual acuity and visual field), IOP, need for supplemental medical therapy, surgical complications, and reoperation for glaucoma or complications.
   Indications: Patients between the ages of 18 and 85 years with inadequately controlled glaucoma who may have had prior intraocular surgery
   Coordinator: Ember Dhillon, CRC, 734-6422

3. Title: Normative Data Collection Study of the Nidek Optical Coherence Tomography RS-3000 for the Measurements of Retinal and RNFL Thickness and Optic Disc Analysis
   PI Michele C. Lim, MD
   Protocol #: 330349
   Sponsor: Nidek, Ltd.
   Purpose: The primary objective of this clinical study is to develop age-specific normal ranges for the thickness of the retina and retinal nerve fiber layer (RNFL) etc. from a U.S. population to support an FDA 510(k) submission for the Nidek Optical Coherence Tomography (OCT) RS-3000 with normative database. The secondary objective is to evaluate any adverse events found during the clinical study.
   Indication: Patients 20 years old and older with normal vision (spectacle correction o.k.).
   Coordinator: Katrina Imson, Sr.CRC, 734-6814

4. Title: Evaluation of Optic Nerve Structure and Function in Patients with Keratoprosthesis
PI: Michele C. Lim, MD
Protocol #: 223055
Sponsor: Department of Ophthalmology & Vision Science
Purpose: To better understand how to monitor patients with a Boston keratoprosthesis (K-pro) for optic nerve damage from glaucoma through optic nerve photography, spectral-domain OCT, kinetic visual fields, and Humphrey visual fields. Patients with a K-pro are at high risk for developing glaucoma and it is difficult to measure eye pressure (IOP) in these patients due to the rigid plastic material from which the K-pro is made. Therefore, finding other measures to evaluate patients with a keratoprosthesis are necessary.
Indication: Patients with a Boston keratoprosthesis
Coordinator: Yao Liu, MD

Cornea

5. Title: Ocular Rosacea: Determining a Specific Diagnostic Test
PI: Mark J. Mannis, MD
Protocol #: 244669
Sponsor: Department of Ophthalmology & Vision Science
Purpose: To determine whether a new diagnostic tool can accurately provide a rapid, cost-effective test for early detection of ocular rosacea. This will potentially lead to considerably earlier treatment and the avoidance of complications that accrue from chronic ocular inflammatory disease.
Indication: Patients with ocular rosacea and with non-roseatic blepharitis, along with normal subjects
Coordinator: Katrina Imson, Sr.CRC, 734-6814

6. Title: Keratoprosthesis in Severely Diseased Corneas
PI: Mark J. Mannis, MD
Protocol # 226833
Sponsor: Department of Ophthalmology & Vision Science
Purpose: To implant either the deratoprosthesis Type I or Type II in severely diseased corneas to serve as an artificial cornea. Type I is for those who have experienced graft failure previously and Type II is for extremely dry eye.
Indication: Patients 2 years old and older with severely diseased corneas where normal cornea transplants have been tried and failed.
Coordinator: Katrina Imson, Sr.CRC, 734-6814

7. Title: Tear Film Osmolarity & Rosacea
PI: Mark J. Mannis, MD
Protocol # 330589
Sponsor: Department of Ophthalmology & Vision Science
Purpose: The aim of this study is to compare the tear film osmolarity in patients with rosacea and those with non-specific dry eye symptoms. We will be using a recently FDA-approved osmometer by TearLab which has been developed based on electrical impedance “lab-on-a-chip” technology to allow us to measure tear film osmolarity quickly, accurately, and in a less invasive manner than the current standard-of-care Schirmer’s test.
Indication: There will be 3 cohorts of patients 18 years old and older: patients with no history of ocular disease, patients with dry eye symptoms, and patients with rosacea

Coordinator: Katrina Imson, Sr.CRC, 734-6814

Retina

8. Title: Study of Ocular Fluid, Serum and Urine for Biomarkers of Eye Disease in Patients
PI: Lawrence S. Morse, MD, PhD
Protocol # 216607
Sponsor: Departments of Ophthalmology & Vision Science, and Endocrinology
Purpose: 1) To determine if there is a concentration gradient for each biomarker studied between the aqueous and the vitreous humors.
   a. To determine if the concentration gradient for each biomarker studied between the aqueous and vitreous humor depends on whether the patient is phakic or pseudophakic.
   b. To determine if there is any correlation between the concentration of biomarkers in serum and ocular fluids.
   c. -To determine if there is any correlation between the concentration of these biomarkers and diabetes control and complications related to diabetes.

   2) To determine the presence of specific biomarkers for retinal disease in serum,urine or ocular fluids.
   a. -To establish a normal database of the signaling molecules and biomarkers in serum,urine, aqueous and vitreous humor of patients with known retinal disease and correlate this with levels from normal patients without retinal or ocular disease.
   b. -To better understand retinal disease based on the molecular signals in ocular fluids.

Indication: Patients 18 years of age and older who are scheduled for an ocular procedure during which vitreous and aqueous humor normally discarded is collected.
Coordinator: Katrina Imson, Sr.CRC, 734-6814

9. Title: Histologic and Immunohistologic Evaluation of Pre-retinal Membranes
PI: Lawrence S. Morse, MD, PhD
Protocol # 227343
Sponsor: Department of Ophthalmology & Vision Science
Purpose: To collect the pre-retinal membranes (surgical specimen) from patients having standard-of-care surgery for proliferative vitreoretinopathy, macular pucker, and diabetic fibrovascular membranes to understand how these membranes develop so we can design methods to prevent the vision loss they cause.
Indication: Patients 18 years of age and older who are scheduled for a vitrectomy surgery
Coordinator: Cindy Wallace, CRC, 734-6393

10. Title: Retinal and RPE Autoimmunity in AMD: Assessment of Correlation with Degree of Response to Ranibizumab Therapy
PI: Lawrence S. Morse, MD, PhD
Protocol # 217330
Sponsor: Dr. Morse; funded by Genentech, Inc.
Purpose: To determine if “wet” AMD patients differ from population normals in the production of anti-Retinal Pigment Epithelium (RPE) or anti-retinal antibody formation. (RPE is the pigment cell layer just outside the retina that nourishes retinal visual cells, and is firmly attached to underlying choroids and overlying retinal visual cells.)

For "wet" AMD patients, to determine if ranibizumab responders differ from anti-VEGF treatment initial non-responders in the production of anti-RPE or anti-retinal antibody formation.
To determine if "wet" AMD patients differ from "dry" AMD patients in the production of anti-RPE or anti-retinal antibody formation.

Indication: Patients 50 years of age and older who either have 1) neovascular "wet" AMD, 2) normal vision, 3) neovascular "wet" AMD which has not responded to Anti-VEGF treatment (such as Lucentis) after 4 or more consecutive injections, or 4) "dry" AMD. Currently only enrolling those who qualify for Group 3.

Coordinator: Ember Dhillon, CRC, 734-6422 and Marisa Salvador, CRC, 734-6302

11. Title: A Phase III, Multinational, Multicenter, Randomized, Double-Masked, Study Assessing the Safety and Efficacy of Intravitreal Injections of DE-109 (three doses) for the Treatment of Active, Non-Infectious Uveitis of the Posterior Segment of the Eye

PI: Lawrence S. Morse, MD, PhD

Protocol # 350350

Sponsor: Santen, Inc.

Purpose: The primary purpose of the trial is to evaluate the safety and efficacy of intravitreal injection of three doses of DE-109 (44 µg, 440 µg, 880 µg) for the treatment of active, non-infectious uveitis of the posterior segment of the eye.
Additional trial objectives are to evaluate: · The long term safety of multiple intravitreal injections of 880 µg dose of DE-109 beyond Mo. 5.
Also, the durability of effect of 880 µg dose(s) of DE-109.

Indication: Patients 18 years of age or older with active uveitis of posterior segment determined to be non-infectious, with vision ≥ 20/200 in the non-study eye.

Coordinator: Cindy Wallace, CRC, 734-6393

12. Title: Phase 1/2 Randomized Prospective Double-Blinded Trial Comparing Intravitreal Administration of Inhibitors of Vascular Endothelial Growth Factor Combined with Proton Beam Irradiation versus Intravitreal Administration of Vascular Endothelial Growth Factor Combined with Sham Irradiation in Treating Exudative Age-related Macular Degeneration

PI: Susanna S. Park, MD, PhD

Protocol # 223071

Sponsor: Dr. Park and Department of Ophthalmology & Vision Science

Purpose: The specific aim of the study is to test the hypothesis that low dose proton beam irradiation combined with intravitreal administration of inhibitor of vascular endothelial growth factor (anti-VEGF) is safe and more effective than treatment with anti-VEGF alone in treating exudative age-related macular degeneration (eAMD). Specifically, the Primary Objective of this study is to determine the safety and efficacy of proton beam radiation combined with ranibizumab (Lucentis) or bevacizumab (Avastin) in treating patients with exudative AMD.

Indication: Patients 50 years of age or older with "wet" age-related macular degeneration.

Coordinator: Katrina Imson, Sr.CRC, 734-6814

13. Title: A Pilot Clinical Trial of the Feasibility and Safety of Intravitreal Autologous Adult Bone Marrow Stem Cells in Treating Eyes with Vision Loss from Retinopathy

PI: Susanna S. Park, MD, PhD

Protocol # 305805

Sponsor: Dr. Park and Department of Ophthalmology & Vision Science

Purpose: This proposed pilot study is to investigate the feasibility and safety of intravitreal autologous Bone Marrow Stem Cell therapy in treating people with irreversible

vision loss from retinal degenerative conditions or retinal vascular disorders. Fifteen subjects with vision loss that meet the inclusion and exclusion criteria of this study will be injected intravitreally with autologous CD34 positive BMSCs.

Indication: Patients 18 years of age or older with 20/100 to Count Fingers visual acuity; vision loss due to "dry" age-related macular degeneration, retinitis pigmentosa, retinal vein occlusion, diabetic retinopathy, and hereditary maculopathy.

Coordinator: Marisa Salvador, CRC, 734-6302

14. Title: Gene Expression Patterns in Age-related Macular Degeneration (AMD)
PI: Allan A. Hunter, III, MD
Protocol #: 247853
Sponsor: Department of Ophthalmology & Vision Science
Purpose: The purpose of this study is to identify a relationship between function mutations (heterozygous and homozygous knockouts) in antioxidant genes and AMD. If such an association is discovered, then it will greatly increase our understanding of AMD and hopefully lead to improved treatment options. We will test candidate genes for an association with Age-related Macular Degeneration (AMD). The causes of AMD are not yet known, however, it is understood that there is a genetic component. Family members of affected individuals have an approximately 2-fold increased risk of developing AMD compared to the general population. For this reason, we would like to determine whether mutations in specific candidate genes might be associated with the disease. If such an association is discovered, then it will greatly increase our understanding of the disease and hopefully lead to improved treatments.
Indication: Patients 55 years of age and older with Age-related Macular Degeneration.
Coordinator: Cindy Wallace, CRC, 734-6393

<u>Neuro-Ophthalmology</u>

15. Title: CAR-PON Smokers
PI: John L. Keltner, MD
Protocol # 349887
Sponsor: Department of Ophthalmology & Vision Science
Purpose: The exact incidence of retinal and optic nerve auto-antigens in normal patients who formerly or currently smoke, with or without an established diagnosis of cancer, is not known. Therefore, the purpose of our study is:
(1) To determine the incidence of CAR and PON-related auto-antigens in former or current smokers with or without a diagnosis of systemic malignancy
(2) To compare the incidence of (1) with age-matched controls who are otherwise healthy and do not have a smoking history, and neither cancer-associated retinopathy (CAR) nor paraneoplastic optic neuropathy (PON) syndrome.
Indication: Patients who are 18 and older with a known or current smoking history of at least 10 pack-year history, who do not have any history of eye disease (except cataract, refractive error, or amblyopia), no history of known autoimmune diseases (such as rheumatoid arthritis, lupus, multiple sclerosis), and no known diabetic retinopathy. Also, Normal age-matched control, never-smoked subjects will also be enrolled, who have never smoked in the past, do not have any history of eye disease (except cataract, refractive error, or amblyopia) with normal eye exam within the last 1-2 years OR no significant past ocular history and without any visual complaints, with or without history of known cancer, no known autoimmune diseases (such as rheumatoid arthritis, lupus, multiple sclerosis), no known diabetic retinopathy and are willing to participate.
Coordinator: Katrina Imson, Sr.CRC, 734-6814

Studies being conducted at Department of Ophthalmology Cadillac Dr. Clinic, 77 Cadillac Dr., Sacramento (Enrollment for both studies below currently on hold)

16. Title: INTERMITTENT EXOTROPIA STUDY 1 (IXT1): A Randomized Trial of Bilateral Lateral Rectus Recession versus Unilateral Lateral Rectus Recession with Medial Rectus Resection for Intermittent Exotropia
PI: Mary O'Hara, M.D.
Protocol #: 217739
Sponsor: National Eye Institute / Jaeb Center for Research
Purpose: The specific aim of the proposed research is to evaluate the effectiveness of bilateral lateral rectus muscle recession versus unilateral lateral rectus recession with medial rectus resection procedures for the treatment of basic type and pseudo divergence excess types of intermittent exotropia. These are both currently standard of care for the treatment of exotropia.
Indication: Children 3 to <11 years old with intermittent exotropia.
Coordinator: Dr. O'Hara, via Barbara Holderreed, 734-6303

17. Title: INTERMITTENT EXOTROPIA STUDY 2 (IXT2): A Randomized Clinical Trial of Observation versus Occlusion Therapy for Intermittent Exotropia
PI: Mary O'Hara, M.D.
Protocol#: 256411
Sponsor: National Eye Institute / Jaeb Center for Research
Purpose: To determine the effectiveness of occlusion (covering one eye) for the treatment of Intermittent Exotropia (IXT) among patients aged 1 to < 11 years who have baseline near stereoacuity of 400 arcsec or better by Preschool Randot stereotest
To determine the natural history of IXT among patients aged 1 to < 11 years who have baseline near stereoacuity of 400 arcsec or better by Preschool Randot stereotest
Indication: Children age 12 months to <11 years with intermittent exotropia.
Coordinator: Dr. O'Hara, via Barbara Holderreed, 734-6303

Visual Psychophysics Laboratory

18. Title: Ophthalmic Imaging Using Adaptive Optics and Optical Coherence Tomography
PI: John S. Werner, PhD.
Protocol#: 223362
Sponsor: National Institutes of Health
Purpose: To learn more about how vision and retinal structure change with age and/or disease
Indication: Males and females age 8 years and older with normal eyes, or males and females with one of the various eye diseases we are studying
Coordinator: Susan Garcia, COT, CRC

19. Title: Temporal Impulse Response Changes Across the Life Span
PI: John S. Werner, PhD.
Protocol#: 230420
Sponsor: National Institutes of Health
Purpose: To learn more about age-related changes in the ability to detect flicker or movement
Indication: Males and females age 18 years and older with normal eyes
Coordinator: Susan Garcia, COT, CRC

20. Title: Age-Related and Disease-Related Changes in the Photopic and Scotopic Full-Field and Multifocal ERGs
PI: John S. Werner, PhD.
Protocol#: 218967
Sponsor: National Institutes of Health
Purpose: To learn more about how the response of the retina changes with age and a disease affecting central vision called “Age-Related Macular Degeneration” (AMD)
Indication: Males and females age 18 years and older with normal eyes or with AMD
Coordinator: Susan Garcia, COT, CRC