

Papers in Peer reviewed Journals:

1. Murthy RK, Grover S, Chalam KV. Temporal macular thinning on Spectral-domain Optical Coherence Tomography in proliferative sickle cell retinopathy. Arch Ophthalmol 2010(Accepted for publication).
2. Chalam KV, S Balaiya, Malyapa R, Hsi W, Brar VS, Murthy RK. Evaluation of Choroidal endothelial cell proliferation after exposure to varying doses of proton beam radiation. Retina 2010 (Accepted for publication).
3. Murthy RK, Storm L, Grover S, Chalam KV. In-vivo high resolution imaging of Optic Nerve Head Drusen using Spectral- domain Optical Coherence Tomography. BMC Medical Imaging 2010 (Accepted for publication).
4. Murthy RK, Brar VS, Chalam KV. Evaluation of ultra wide angle 'ora-ora' high refractive index self-stabilizing contact lens for vitreous surgery. Retina 2010 (Accepted for publication).
5. Murthy RK, Chalam KV. Assistant Independent OptiFlex system for contact as well as non contact wide angle viewing in vitreo-retinal surgery. Arch Ophthalmol 2010; 128(4):490-2.
6. Murthy RK, Chalam KV. Spectral domain OCT documented resolution of pseudophakic cystoid macular edema after intravitreal triamcinolone. Ophthalmology and Eye diseases 2010;2:1-4.
7. Murthy RK, Grover S, Chalam KV. Sequential spectral domain OCT documentation of retinal changes after branch retinal artery occlusion. Clin Ophthalmol 2010; 4:327-9.
8. Grover S, Murthy RK, Brar VS, Chalam KV. Comparison of retinal thickness in normal eyes using Stratus and Spectralis Optical Coherence Tomography. Invest Ophthalmol Vis Sci. 2010; 51(5):2644-7.
9. Chalam KV, Murthy RK, Gupta SK, Brar VS, Grover S. Foveal structure delineated by Spectral domain Optical Coherence Tomography correlates with visual function after Macular Hole surgery. Eur J Ophthalmol 2010; 20(3):572-7.
10. AT Kelmenson, Brar VS, Murthy RK, Chalam KV. Fundus autofluorescence and Spectral-domain Optical Coherence Tomography in early detection of Plaquenil maculopathy. Eur J Ophthalmol 2009 Dec 30. [Epub ahead of print]
11. Chalam KV, Balaiya S, Murthy RK. Accurate estimation of Vascular Endothelial Growth Factor levels in micro samples with a low cost bead based assay. Retina 2010; 30(5):815-9.
12. Balaiya S, Murthy RK, Brar VS, Chalam KV. Evaluation of Ultraviolet light toxicity on cultured Retinal Pigment Epithelial and Retinal Ganglion cells. Clin Ophthalmol 2010 Feb 2; 4:33-9.
13. Chalam KV, Murthy RK, Gupta SK, Brar VS. Spectral domain optical coherence tomography features of multiple subfoveal retinal pigment epithelial tears after intravitreal bevacizumab. Ind J Ophthalmol 2010.

14. Chalam KV, Murthy RK, Gupta SK, Brar VS. Spectral-domain OCT guided photodynamic therapy for choroidal hemangioma. *Cases Journal* 2010
15. Brar VS, Sharma RK, Murthy RK, Chalam KV. Evaluation of differential toxicity of varying doses of Bevacizumab on retinal ganglion cells, retinal pigment epithelial cells and vascular endothelial growth factor enriched choroidal endothelial cells. *J Ocul Pharmacol and Ther.* 2009; 25(6):507-11.
16. Balaiya S, Murthy RK, Brar VS, Chalam KV. Effects of Indocyanine Green on Cultured Retinal Ganglion Cells In-Vitro. *BMC Res Notes* 2009; 2:236.
17. Brar VS, Murthy RK, Chalam KV. Functional microperimetry and SD-OCT confirm consecutive retinal atrophy from optic nerve pit. *Clin Ophthalmol.* 2009; 3:625-8.
18. Chalam KV, Agarwal S, Brar VS, Murthy RK, Sharma RK .Evaluation of cytotoxic effects of bevacizumab on human corneal cells. *Cornea Apr;* 28(3):328-33,2009.
19. Chalam KV, Brar VS, Keshavamurthy R. Evaluation of Modified Portable Digital Camera for Screening of Diabetic Retinopathy. *Ophthalmic Res* May 28;42(1):60-62,2009.
20. Grover S, Murthy RK, Brar VS, Chalam KV. Normative Data for Macular Thickness by High-Definition Spectral-Domain Optical Coherence Tomography (Spectralis).*Am J Ophthalmol* 2009 May 7.
21. Gupta S, Syed F, Murthy RK, Brar VS, Chalam KV. Sinonasal lymphoma masquerading as persistent blepharoconjunctivitis. *Orbit* 28(1):34-6,2009
22. Browning DJ, Apte RS, Bressler SB, Chalam KV, Danis RP, Davis MD, Kollman C, Qin H, Sadda S, Scott IU; Diabetic Retinopathy Clinical Research Network. Association of the extent of diabetic macular edema as assessed by optical coherence tomography with visual acuity and retinal outcome variables. *Retina* Mar;29(3):300-5,2009.
23. Sharma RK, Rogojina AT, Chalam KV. Multiplex immunoassay analysis of biomarkers in clinically accessible quantities of human aqueous humor. *Mol Vis* 15:60-9, 2009.
24. Gupta SK, Brar VS, Keshavamurthy R, Chalam KV. Aplastic anemia induced disc edema and visual loss in pregnancy: a case report. *Cases J* Nov 18;1(1):322, 2008.
25. Chalam KV, Murthy RK. Reusable sutureless silicone ring for housing contact lens during vitreo-retinal surgery. *Retina* Nov-Dec;28(10):1550-1,2008.
26. Chalam KV, R Keshavmurthy, Brar VS. Spectral domain Optical Coherence Tomography documented resolution of recalcitrant macular edema after intravitreal Bevacizumab in Branch Retinal Vein Occlusion. *Eur Journal of Ophthalmol* Sep-Oct;18(5):831-3, 2008.
27. Shah VA, Chalam KV. Values for macular perimetry using the MP-1 microperimeter in normal subjects. *Ophthalmic Res* 41(1):9-13, 2009.
28. Chalam KV, Sharma RS, RK Murthy. Limitations in assessing nerve growth factor levels in aqueous humor samples from human eyes. *BMC Res Notes* Jun 5; 1:22,2008.

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30. Grover S, Gupta S, Sharma R, Brar VS, Chalam KV. Intracameral bevacizumab effectively reduces aqueous vascular endothelial growth factor concentrations in neovascular glaucoma. *Br J Ophthalmol* Feb;93(2):273-4,2009.
31. Chalam KV, Shah GY, Agarwal S, Gupta SK. Illuminated curved 25-gauge vitrectomy probe for removal of subsclerotomy vitreous in vitreoretinal surgery. *Indian J Ophthalmol* Jul-Aug;56(4):331-4,2008.
32. Chalam KV, Shailesh Gupta, Sandeep Grover, Brar VS, Swati Agarwal. Intracameral Avastin dramatically resolves Iris neovascularization and reverses neovascular glaucoma. *Eur Journal of Ophthalmol* 18(2):255-62, 2008.
33. Chalam KV, Tina Tillis, Farhana Syed, Brar VS. Acute Bilateral Simultaneous Angle Closure Glaucoma after Topiramate Administration. *J Med Case Reports* 8;2:1, 2008
34. Chalam KV, Gupta SK, Brar VS. Inverse Argyll Robertson Pupil in Burkitt's lymphoma. *Clinical Ophthalmology* 2(1):1-4, 2008.
35. Chalam KV, Gupta SK, Agarwal S. Illuminated curved vitrectomy probe for vitreoretinal surgery. *Ophthalmic Surg Lasers Imaging*. Nov-Dec; 38(6):525-6, 2007.
36. Chalam KV, Gupta SK, Agarwal S. Lightweight autoclavable wide-angle contact lens for vitreous surgery. *Ophthalmic Surg Lasers Imaging* Nov-Dec;38(6):523-4,2007
37. Chalam KV, Chokshi A, Agarwal S, Edward DP. Complications of AlphaCor keratoprosthesis: a clinicopathologic report. *Cornea* Dec;26(10):1258-60,2007
38. Chalam KV, Gupta SK, Agarwal S. Rituximab effectively reverses papilledema associated with cerebral venous sinus thrombosis in antiphospholipid antibody syndrome. *Eur J Ophthalmol* 2007 Sep-Oct; 17(5):867-70.
39. Chalam KV, Agarwal S, Gupta SK, Shah GY. Recovery of retinal sensitivity after transient branch retinal artery occlusion. *Ophthalmic Surg Lasers Imaging* Jul-Aug;38(4):328-9,2007.

Papers Submitted to Peer Reviewed Journals:

1. Tripathi, R.C., Li, J., Tripathi, B.J., Edward, D.P., Chalam, K.V., Li, T., Lin, N., Adamis, A. Evidence for Human Ciliary Epithelium as a Source of Synthesis and Secretion of Vascular Endothelial Growth Factor (VEGF) In Neovascular Glaucoma. *Archives of Ophthalmology*

2. Brar VS, Sharma RK, Murthy RK, Chalam KV. Bevacizumab neutralizes protective effect of Vascular Endothelial Growth Factor on retinal ganglion cells. *Mol Vis*
3. Balaiya S., Vkrum S Brar, Murthy RK, Chalam KV. Comparative in vitro safety analysis of dyes for chromovitrectomy – Indocyanine Green, Brilliant Blue G, Bromophenol Blue and Infracyanine Green. *Retina*
4. Balaiya S, Malyapa RS, Hsi W, Hwang DW, Murthy RK, Chalam KV. Evaluation of differential proton beam radiation sensitivity of cultured proliferating choroidal endothelial and retinal pigment epithelial cells with clonogenic assay. *Ophthalmic Research*

Peer Reviewed Abstract Publications:

1. RK Murthy, S Balaiya, VS Brar, KV Chalam. "Effects of Indocyanine green on cultured retinal ganglion cells: An in vitro study" *International society of ocular toxicology, Philadelphia, PA, 2008*
2. ML Roberts, RK Sharma, VS Brar, KV Chalam. "Effect of bevacizumab on viability of human corneal cell lines" *International society of ocular toxicology, Philadelphia, PA, 2008*
3. S. Balaiya, R Malyapa, KV Chalam. "In vitro study of proton beam radiation toxicity on retinal cells" *International society of ocular toxicology, Philadelphia, PA, 2008*
4. VS Brar, S Balaiya, RK Murthy, KV Chalam, "An in vitro effect of UV-induced phototoxicity on retinal cells" *International society of ocular toxicology, Philadelphia, PA, 2008*
5. Chalam KV, Gupta SK, Brar VS, Murthy RK. Evaluation of Ultra wide angle 'ora-ora' high refractive index self-stabilizing Wide-angle Contact lens for Vitreous Surgery. *American Society of Retina Specialists October 11–15, 2008 Maui, Hawaii.*
6. Grover S, Keshavamurthy R, Brar VS, Chalam KV. Normative data for macular thickness by spectral-domain OCT (Spectralis). *American Society of Retina Specialists October 11–15, 2008 Maui, Hawaii.*
7. Brar VS, Sharma RK, Chalam KV. In vitro toxicity of bevacizumab (Avastin®) in retinal ganglion and choroidal endothelial cell. *American Society of Retina Specialists October 11–15, 2008 Maui, Hawaii.*
8. Gupta SK, Brar VS, Keshavamurthy R, Sharma RK, Chalam KV. Evaluation of aqueous VEGF levels after intravitreal bevacizumab for retinal vein occlusion. *American Society of Retina Specialists October 11–15, 2008 Maui, Hawaii.*
9. Murthy RK, Chalam KV. "Quality of Life Measured by the 25-Item NEI Visual Function Questionnaire Correlates Accurately With Severity of Diabetic Macular Edema" *American Academy of Ophthalmology, Atlanta, 2008.*

10. Chalam KV, Murthy RK, Gupta SK. "Inner Segment/Outer Segment Changes on Ultrahigh-Resolution Spectral OCT Accurately Predict Visual Acuity Recovery After macular hole repair" *American Academy of Ophthalmology, Atlanta, 2008.*
11. Grover S, Murthy RK, Brar S, Chalam KV. Macular thickness in normal subjects by spectral-domain OCT (Spectralis)". *American Academy of Ophthalmology, Atlanta, 2008.*
12. Chalam KV, Gupta SK. Aqueous Vascular Endothelial Growth Factor Levels Accurately Correlate With Regression of Neovascularization After Avastin Administration in Exudative Macular Degeneration. *American Academy of Ophthalmology, Atlanta, 2008.*
13. VS Brar, S Balaiya, RK Murthy, KV Chalam "An in vitro effect of UV-induced phototoxicity on retinal cells" *ASIA Association of Research in vision and ophthalmology, Hyderabad, India, 2009*
14. S. Balaiya, R. Malyapa, N. Mendenhall, KV Chalam. "An effect of proton radiotherapy on cultured retinal cells" *ASIA Association of Research in vision and ophthalmology, Hyderabad, India, 2009*
15. R Keshavamurthy, S Grover, KV Chalam. "Difference In Macular Thickness As Measured By Time-domain OCT (Stratus) And Spectral-domain OCT (Spectralis)" *ASIA Association of Research in vision and ophthalmology, Hyderabad, India, 2009*
16. Keshavamurthy R, Balaiya S, Chalam KV. Comparative Effect of Indocyanine and Infracyanine Green on Cultured Retinal Ganglion Cells. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
17. Sharma RK, Roberts ML, Chalam KV. Protective Effect of Preconditioning on Oxidative Stress Induced Cell Death in RGC Cells. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
18. Patel MC, Balaiya S, Chalam KV. Ultraviolet Induced Oxidative Stress on Retinal Ganglion and Pigment Epithelial Cells. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
19. Brar VS, Sharma RK, Keshavamurthy R, Chalam KV. Vascular Endothelial Growth Factor Protects Against Oxidative Stress in Differentiated Retinal Ganglion Cells. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
20. Kelmenson AT, Keshavamurthy R, Brar VS, Hwang DW, Chalam KV, Grover S. Comparative Difference in Macular Thickness as Measured Between Spectral-Domain OCT (Spectralis) and Time-Domain OCT (Stratus). *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
21. Hwang DW, Keshavamurthy R, Brar VS, Chalam KV, Grover S. Establishment of Macular Thickness in Normal Eyes With Spectral-Domain Spectralis Optical Coherence Tomography. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
22. Roberts ML, Sharma RK, Gupta SK, Chalam KV. Proliferating Retinal Cells Produce Growth Factors that Create Pro-Proliferation Environment. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*

23. Cappelli R, Keshavamurthy R, Brar VS, Chalam KV, Grover S. Evaluation of Thickness of Individual Layers of the Retina With Spectral-domain OCT for Establishment of Normal Clinical Values. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
24. Storm L, Keshavamurthy R, Brar V, Chalam KV, Grover S. Evaluation of Optic Nerve Head Drusen Using Spectral-domain OCT (Spectralis). *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida*
25. Chalam KV, Balaiya S, Keshavamurthy R. Evaluation of Differential Sensitivity of Retinal and Choroidal Cells to Proton Beam Radiation: A Model for Age Related Macular Degeneration. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
26. Balaiya S, Malyapa R, Mendenhall N, Chalam KV. Proton Radiation Predominantly Destroys Choroidal Endothelial Cells While Preserving Retinal Ganglion Cells. *Association for Research in Vision and Ophthalmology May 3-7, 2009, Ft. Lauderdale, Florida.*
27. Chalam KV, R Keshavamurthy, Gupta SK. Concurrent parsplana vitrectomy for removal of dislocated nuclear fragments at time of phacoemulsification eliminates the risk of retinal detachment. *American Academy of Ophthalmology, Oct 24-28th, Sanfrancisco, California.*
28. R. Keshavamurthy, V.S. Brar, S.K. Gupta, S. Grover, K.V. Chalam. Foveal Microstructure as Delineated by Spectral-Domain OCT Accurately Predicts Functional Outcome on Microperimetry After Macular Hole Surgery. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida.*
29. V.S. Brar, R. Keshavamurthy, S. Balaiya, K.V. Chalam. Aqueous Vascular Endothelial Growth Factor Levels in Exudative Age Related Macular Degeneration after Combination Treatment with Bevacizumab and Photodynamic Therapy. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida.*
30. K. V. Chalam, S. Balaiya, R. Keshavamurthy, Brar VS. Comparative *in vitro* Safety Analysis of Vital Dyes for Chromovitrectomy-Indocyanine Green, Infracyanine Green, Brilliant Blue Green and Bromophenol Blue. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida.*
31. J.D. Edwards, S. Balaiya, K.V. Chalam. Estimation of TNF- α Concentration In Aqueous Humor Samples of Normal Human Subjects With Bead Based Immuno Assay. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*
32. S. Grover, S. Balaiya, V.S. Brar, K.V. Chalam. Measurement of Aqueous VEGF levels in Patients with Retinal Diseases is Superior and Accurate in Fresh Than Stored Samples. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*

33. R. Radhakrishnan, S. Balaiya, V.S. Brar, R.K. Murthy, S. Grover, K.V. Chalam. Aqueous VEGF levels after Intravitreal Ranibizumab for Diabetic Macular Edema. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*
34. R. Cappelli, K.V. Chalam, S. Grover. Spectral-Domain Optical Coherence Tomography and Fundus Autofluorescence Findings in Patients with Pattern Dystrophy. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*
35. D.W. Hwang, S. Balaiya, R. Malyapa, K.V. Chalam. Effect of Proton Beam Radiation on The Survival of Two Different Ocular Cell-colonies: Fine Tuning Treatment of Choroidal Neovascularization with Radiation. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*
36. S. Balaiya, R. Malyapa, K.V. Chalam. Proton Beam Radiation Selectively Destroys Proliferating Choroidal Endothelial Cells and preserves Non-proliferating Retinal Pigment Epithelial Cells: A Model for Choroidal Neovascular Membrane. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*
37. Rajesh K Sharma, Anna T Rogojina, K.V. Chalam. Anti-VEGF therapy normalizes pathological intraocular environment in neovascular conditions. *Association for Research in Vision and Ophthalmology May 2-6, 2010, Ft.Lauderdale, Florida*