Contents

1. Clinical Trials in Cornea 1
Archita Singh, Noopur Gupta

Herpetic Eye Disease Study (HEDS) I *1*
Herpetic Eye Disease Study (HEDS) II *3*
Mycotic Ulcer Treatment Trial (MUTT) I *5*
Mycotic Ulcer Treatment Trial (MUTT) II *7*
Steroid in Corneal Ulcers Trial (SCUT) *8*
Collaborative Longitudinal Evaluation of Keratoconus (CLEK) Study *9*
Collaborative Corneal Transplantation Studies (CCTS) *11*
Cornea Donor Study *13*
Dream Study (Dry Eye Assessment and Management) *15*
Prospective Evaluation of Radial Keratotomy (PERK) Study *16*
Pioneer Study—Prospective Intraoperative and Perioperative Ophthalmic ImagiNg with Optical CoherEncE TomogRaphy *17*

2. Clinical Trials in Glaucoma 27
Priyanka Ramesh, Shikha Gupta

Early Manifest Glaucoma Trial (EMGT) *27*
Collaborative Initial Glaucoma Treatment Study (CIGTS) *29*
Ocular Hypertension Treatment Study (OHTS) *30*
European Glaucoma Prevention Study *32*
Collaborative Normal Tension Glaucoma Study (CNTGS) *34*
Advanced Glaucoma Intervention Study (AGIS) *36*
Glaucoma Laser Trial Follow-up Study (GLTFS) *38*
Fluorouracil Filtering Surgery Study (FFSS) *40*
Tube Versus Trabeculectomy Study (TVT) *42*
Trabeculectomy Versus Canaloplasty (TVC Study) in the Treatment of Patients with Open Angle Glaucoma: A Prospective Randomized Clinical Trial *43*
Effectiveness of Early Lens Extraction for the Treatment of Primary Angle Closure Glaucoma (EAGLE): A Randomized Control Trial *45*
Early Lens Extraction with Intraocular Lens Implantation for the Treatment of Primary Angle Closure Glaucoma: An Economic Evaluation Based on Data from the EAGLE Trial *47*
The Ahmed Versus Baerveldt Study (AVB Study). 5-Year Treatment Outcomes *49*

A Randomized, Controlled Comparison of Latanoprostene Bunod and Latanoprost 0.005% in the Treatment of Ocular Hypertension and Open Angle Glaucoma: The VOYAGER Study *52*
A Prospective, Randomized, Placebo Controlled, Double-Masked, Three-Armed, Multicenter Phase II/III Trial for the Study of a Topical Treatment of Ischemic Central Retinal Vein Occlusion to Prevent Neovascular Glaucoma—the STRONG Study: Study Protocol for A Randomized Controlled Trial *54*
Glaucoma Epidemiological Studies in India *57*
Other Recent Trails *66*

3. Clinical Trials in Diabetic Retinopathy-I 78
Neha Goel, Vinod Kumar

Wisconsin Epidemiological Study of Diabetic Retinopathy (WESDR) *78*
Diabetes Control and Complications Trial (DCCT) *80*
Epidemiology of Diabetes Interventions and Complications (EDIC) *82*
United Kingdom Prospective Diabetes Study (UKPDS) *83*
Appropriate Blood Pressure Control in NIDDM (ABCD) *85*

4. Clinical Trials in Diabetic Retinopathy-II 90
Neha Goel, Vinod Kumar

Diabetic Retinopathy Study (DRS) *90*
Early Treatment Diabetic Retinopathy Study (ETDRS) *93*
Diabetic Retinopathy Vitrectomy Study (DRVS) *98*

5. Clinical Trials in Diabetic Retinopathy-III 103
Neha Goel, Brijesh Takkar, Pooja Shah

Diabetic Retinopathy Clinical Research Network (DRCR.net) *103*
Other Important Conclusions of Various DRCR.net Studies *122*

6. Clinical Trials in Diabetic Retinopathy-IV 131
Neha Goel, Saurabh Verma, Shorya Azad

Ranibizumab for Edema of the Macula in Diabetes: A Phase 2 Study (READ-2) *132*
A Study of Ranibizumab Injection in Subjects with Clinically Significant Macular Edema with Center Involvement Secondary to Diabetes Mellitus (RISE and RIDE) *134*
Safety and Efficacy of Ranibizumab in Diabetic Macular Edema with Center Involvement (RESOLVE) *136*
Ranibizumab Monotherapy or Combined with Laser Versus Laser Monotherapy for Diabetic Macular Edema (RESTORE) *137*

A Prospective Randomized Trial of Intravitreal Bevacizumab or Laser Therapy in the Management of Diabetic Macular Edema (BOLT) *139*
DME and VEGF TRAP-EYE: Investigation of Clinical Impact (DA VINCI) *140*
VEGF Trap-Eye in Vision Impairment due to DME (Vista DME) *142*
Fluocinolone Acetonide in Diabetic Macular Edema (FAME) *143*
Three-Year, Randomized, Sham-Controlled Trial of Dexamethasone Intravitreal Implant in Patients with Diabetic Macular Edema (MEAD study) *144*
A Randomized Clinical Trial of Intravitreal Bevacizumab Versus Intravitreal Dexamethasone for Diabetic Macular Edema: The Bevordex Study *146*
Dexamethasone Implant for Diabetic Macular Edema in Naive Compared with Refractory Eyes: The International Retina Group Real-Life 24-Month Multicenter Study. The IRGREL-DEX Study *147*

7. Clinical Trials in Retinal Vascular Occlusions 153
Neha Goel, Pooja Shah, Vinod Kumar

Branch Vein Occlusion Study (BVOS) *153*
Central Vein Occlusion Study (CVOS) *156*
Standard Care Versus Corticosteroid for Retinal Vein Occlusion (SCORE) Study *161*
Ranibizumab for the Treatment of Macular Edema Following Branch Retinal Vein Occlusion: Evaluation of Efficacy and Safety (BRAVO) *165*
Central Retinal Vein Occlusion Study: Evaluation of Efficacy and Safety (CRUISE) *167*
Global Evaluation of Implantable Dexamethasone in Retinal Vein Occlusion with Macular Edema (GENEVA) *168*
Controlled Phase 3 Evaluation of Repeated Intravitreal Administration of VEGF Trap-Eye in Central Retinal Vein Occlusion: Utility and Safety (COPERNICUS) *171*
General Assessment Limiting Infiltration of Exudates in Central Retinal Vein Occlusion with VEGF Trap-Eye (GALILEO) *173*
Study of Comparative Treatments for Retinal Vein Occlusion 2 (SCORE 2) *174*
Study to Assess the Clinical Efficacy and Safety of Intravitreal Aflibercept Injection in Patients with Branch Retinal Vein Occlusion (VIBRANT) *175*
Head-To-Head Comparison of Ranibizumab PRN Versus Single-Dose Dexamethasone for Branch Retinal Vein Occlusion (COMRADE-B) *177*
Clinical Efficacy and Safety of Ranibizumab Versus Dexamethasone for Central Retinal Vein Occlusion (COMRADE-C): A European Label Study *178*

Comparison of Ranibizumab Versus Dexamethasone for Macular Edema Following Retinal Vein Occlusion: 1-year Results of the COMRADE Extension Study *179*

8. Clinical Trials in Age-related Macular Degeneration-I .. 186
Neha Goel, Vinod Kumar

Laser Photocoagulation *186*
Verteporfin Photodynamic Therapy *190*

9. Clinical Trials in Age-related Macular Degeneration-II 207
Neha Goel, Arpit Sharma, Rohan Chawla

Pegaptanib Sodium (Macugen) *208*
Ranibizumab (Lucentis) *210*
Bevacizumab (Avastin) *227*
Ranibizumab Versus Bevacizumab *230*
VEGF Trap-Eye (Aflibercept, Eylea) *238*
Brolucizumab *243*

10. Clinical Trials in Age-related Macular Degeneration-III 253
Pooja Shah, Vinod Kumar

RhuFab V2 Ocular Treatment Combining the Use of Visudyne to Evaluate Safety (FOCUS) *253*
Protect Study *255*
Torpedo Trial *255*
Summit Trials *257*
Radical (Reduced Fluence Visudyne-Anti-VEGF-Dexamethasone in Combination for AMD Lesions) *262*
Cabernet (The Choroidal neovascularization Secondary to AMD Treated with Beta Radiation Epiretinal Therapy) *264*
Initial Versus Delayed Photodynamic Therapy in Combination with Ranibizumab for Treatment of Polypoidal Choroidal Vasculopathy: The Fujisan Study *266*
Aflibercept in Polypoidal Choroidal Vasculopathy (PLANET) Study *267*

11. Clinical Trials in Age-related Macular Degeneration-IV 273
Pooja Shah, Arpit Sharma, Neha Goel

Age-related Eye Disease Study (AREDS) *273*
Age-related Eye Disease Study 2 *276*
Complications of Age-related Macular Degeneration Prevention Trial (CAPT) *278*

12. Clinical Trials in Retinal Detachment 284
Vinod Kumar, Neha Goel

Silicone Oil Study *284*
Scleral Buckling Versus Primary Vitrectomy in Rhegmatogenous Retinal Detachments (SPR) Study *287*
Pneumatic Retinopexy versus Vitrectomy for the Management of Primary Rhegmatogenous Retinal Detachment Outcomes Randomized Trial (PIVOT) *290*

13. Miscellaneous Clinical Trials: Endophthalmitis Vitrectomy Study 295
Vinod Kumar, Neha Goel

Endophthalmitis Vitrectomy Study (EVS) *295*
Limitations *299*

14. Clinical Trials in Retinopathy of Prematurity 301
Pooja Shah, Neha Goel

Cryotherapy for Retinopathy of Prematurity (CRYO-ROP) *301*
Early Treatment for Retinopathy of Prematurity Study (ETROP) *304*
Bevacizumab Eliminates the Angiogenic Threat of Retinopathy of Prematurity (BEAT-ROP) *309*
Supplemental Therapeutic Oxygen for Prethreshold Retinopathy of Prematurity (STOP-ROP) *312*
High Oxygen Percentage in Retinopathy of Prematurity Study (HOPE-ROP) *314*
Effects of Light Reduction on Retinopathy of Prematurity (LIGHT-ROP) *315*
Photographic Screening for Retinopathy of Prematurity Study (PHOTO-ROP) *316*
Ranibizumab Versus Laser Therapy for the Treatment of Very Low Birth Weight Infants with Retinopathy of Prematurity (RAINBOW): An Open-Label Randomized Controlled Trial *319*

15. Miscellaneous Clinical Trials: Infant Aphakia Treatment Study 324
Neha Goel, Sonali Gupta

Infant Aphakia Treatment Study (IATS) *324*

16. Clinical Trials in Amblyopia: Pediatric Eye Disease Investigator Group (PEDIG) Studies 328
Sumit Monga, Neha Goel

Amblyopia Treatment Study (ATS)–1 *328*
Amblyopia Treatment Study (ATS)–2A, 2B, 2C *331*
Amblyopia Treatment Study–3 *335*

Amblyopia Treatment Study–4 *338*
Amblyopia Treatment Study–5(1) *339*
Amblyopia Treatment Study–5(2) *340*
Amblyopia Treatment Study–6 *342*
Amblyopia Treatment Study–7 *343*
Amblyopia Treatment Study–8 *344*
Amblyopia Treatment Study–9(1) *345*
Amblyopia Treatment Study–9(2) *346*
Amblyopia Treatment Study–10 *347*
Amblyopia Treatment Study–11 *349*
Amblyopia Treatment Study–12 *349*
Amblyopia Treatment Study–13 *350*
Amblyopia Treatment Study–14 *352*
Amblyopia Treatment Study–15 *353*
Amblyopia Treatment Study–16 *354*
Amblyopia Treatment Study–17 *355*
Amblyopia Treatment Study–18 *357*
Amblyopia Treatment Study–18 *358*
Amblyopia Treatment Study–19 *359*
Amblyopia Treatment Study–20 *360*

17. Clinical Trials in Neuro-ophthalmology 372
Anju Bhari, Swati Phuljhele

Optic Neuritis and Multiple Sclerosis *372*
Clinically Isolated Syndrome (CIS) and Related Clinical Trials *375*
Traumatic Optic Neuropathy *385*
Leber's Hereditary Optic Neuropathy (LHON) *390*

18. Miscellaneous Clinical Trials: Collaborative Ocular Melanoma Study 396
Neha Goel, Vinod Kumar

Collaborative Ocular Melanoma Study (COMS) *396*

19. Clinical Trials in Ocular Complications of AIDS 402
Neha Goel, Vinod Kumar

Longitudinal Study of the Ocular Complications of AIDS (LSOCA) *402*
Foscarnet–Ganciclovir Cytomegalovirus Retinitis Trial (FGCRT) *409*

Index 415