

Bibliography

Microdialysis in Eye, July 2013

[Different intravitreal properties of three triamcinolone formulations and their possible impact on retina practice.](#)

Chen H, Sun S, Li J, Du W, Zhao C, Hou J, Xu Y, Cheng L.
Invest Ophthalmol Vis Sci. 2013 Feb 28. doi:pil: iovs.12-11460v1. 10.1167/iov.12-11460. [Epub ahead of print]

[Na⁺-independent nucleoside transporters regulate adenosine and hypoxanthine levels in muller cells and the inner blood-retinal barrier.](#)

Akanuma S, Soutome T, Hisada E, Tachikawa M, Kubo Y, Hosoya K.
Invest Ophthalmol Vis Sci. 2013 Feb 27;54(2):1469-77. doi: 10.1167/iov.12-10905.

[Neuroprotective effects of angiotensin II type 1 receptor \(AT1-R\) blocker via modulating AT1-R signaling and decreased extracellular glutamate levels.](#)

Fujita T, Hirooka K, Nakamura T, Itano T, Nishiyama A, Nagai Y, Shiraga F.
Invest Ophthalmol Vis Sci. 2012 Jun 26;53(7):4099-110. Print 2012 Jun.

[\(1S, 3S\)-3-amino-4-difluoromethylenyl-1-cyclopentanoic acid \(CPP-115\), a potent \$\gamma\$ -aminobutyric acid aminotransferase inactivator for the treatment of cocaine addiction.](#)

Pan Y, Gerasimov MR, Kvist T, Wellendorph P, Madsen KK, Pera E, Lee H, Schousboe A, Chebib M, Bräuner-Osborne H, Craft CM, Brodie JD, Schiffer WK, Dewey SL, Miller SR, Silverman RB.
J Med Chem. 2012 Jan 12;55(1):357-66. Epub 2011 Dec 30.

[Intravitreal kinetics of hesperidin, hesperetin, and hesperidin G: effect of dose and physicochemical properties.](#)

Srirangam R, Hippalgaonkar K, Majumdar S.
J Pharm Sci. 2012 Apr;101(4):1631-8. doi: 10.1002/jps.23047. Epub 2012 Jan 6.

[Pharmacokinetic analysis of topotecan after superselective ophthalmic artery infusion and periocular administration in a porcine model.](#)

Schaiquevich P, Buitrago E, Ceciliano A, Fandino AC, Asprea M, Sierre S, Abramson DH, Bramuglia GF, Chantada GL.
Retina. 2012 Feb;32(2):387-95.

[Interaction between topically and systemically coadministered P-glycoprotein substrates/inhibitors: effect on vitreal kinetics.](#)

Hippalgaonkar K, Srirangam R, Avula B, Khan IA, Majumdar S.
Drug Metab Dispos. 2010 Oct;38(10):1790-7. Epub 2010 Jul 1.

[Vitreal pharmacokinetics of peptide-transporter-targeted prodrugs of ganciclovir in conscious animals.](#)

Janoria KG, Boddu SH, Natesan S, Mitra AK.
J Ocul Pharmacol Ther. 2010 Jun;26(3):265-71.

[Involvement of system A in the retina-to-blood transport of L-proline across the inner blood-retinal barrier.](#)

Yoneyama D, Shinozaki Y, Lu WL, Tomi M, Tachikawa M, Hosoya K.
Exp Eye Res. 2010 Apr;90(4):507-13. Epub 2010 Jan 13.

[Vitreous pharmacokinetics of biotinylated ganciclovir: role of sodium-dependent multivitamin transporter expressed on retina.](#)

Janoria KG, Boddu SH, Wang Z, Paturi DK, Samanta S, Pal D, Mitra AK.
J Ocul Pharmacol Ther. 2009 Feb;25(1):39-49.

[Roles of inner blood-retinal barrier organic anion transporter 3 in the vitreous/retina-to-blood efflux transport of p-aminohippuric acid, benzylpenicillin, and 6-mercaptopurine.](#)

Hosoya K, Makihara A, Tsujikawa Y, Yoneyama D, Mori S, Terasaki T, Akanuma S, Tomi M, Tachikawa M.
J Pharmacol Exp Ther. 2009 Apr;329(1):87-93. Epub 2008 Dec 30.

[Evaluation of the modulation of P-glycoprotein \(P-gp\) on the intraocular disposition of its substrate in rabbits.](#)

Senthikumari S, Velpandian T, Biswas NR, Saxena R, Ghose S.
Curr Eye Res. 2008 Apr;33(4):333-43.

[Retinal damage caused by high intraocular pressure-induced transient ischemia is prevented by coenzyme Q10 in rat.](#)

Nucci C, Tartaglione R, Cerulli A, Mancino R, Spanò A, Cavaliere F, Rombolà L, Bagetta G, Corasaniti MT, Morrone LA.
Int Rev Neurobiol. 2007;82:397-406.

[Controlled delivery of ganciclovir to the retina with drug-loaded Poly\(d,L-lactide-co-glycolide\) \(PLGA\) microspheres dispersed in PLGA-PEG-PLGA Gel: a novel intravitreal delivery system for the treatment of cytomegalovirus retinitis.](#)

Duvvuri S, Janoria KG, Pal D, Mitra AK.
J Ocul Pharmacol Ther. 2007 Jun;23(3):264-74.

[The ionic stoichiometry of the GLAST glutamate transporter in salamander retinal glia.](#)

Owe SG, Marcaggi P, Attwell D.
J Physiol. 2006 Dec 1;577(Pt 2):591-9. Epub 2006 Sep 28.

[Vitreous pharmacokinetics of dipeptide monoester prodrugs of ganciclovir.](#)

Majumdar S, Kansara V, Mitra AK.
J Ocul Pharmacol Ther. 2006 Aug;22(4):231-41.

[Application of microdialysis to evaluate the efflux transport of estradiol 17-beta glucuronide across the rat blood-retinal barrier.](#)

Katayama K, Ohshima Y, Tomi M, Hosoya K.
J Neurosci Methods. 2006 Sep 30;156(1-2):249-56. Epub 2006 Apr 18.

[Ascorbic acid concentration in rabbit vitreous measured by microdialysis with HPLC-electrochemical detection before and after vitreous surgery.](#)

Koide K, Zhang XM, Ohishi K, Usami Y, Hotta Y, Hiramitsu T.
Exp Eye Res. 2006 May;82(5):868-73. Epub 2005 Dec 1.

[Neuroprotective effects of D-allose against retinal ischemia-reperfusion injury.](#)

Hirooka K, Miyamoto O, Jinming P, Du Y, Itano T, Baba T, Tokuda M, Shiraga F.
Invest Ophthalmol Vis Sci. 2006 Apr;47(4):1653-7.

[Glutamate level in optic nerve head is increased by artificial elevation of intraocular pressure in rabbits.](#)

Okuno T, Oku H, Sugiyama T, Ikeda T.
Exp Eye Res. 2006 Mar;82(3):465-70. Epub 2005 Sep 15.

[Microdialysis assessment of drug delivery systems for vitreoretinal targets.](#)

Duvvuri S, Rittenhouse KD, Mitra AK.
Adv Drug Deliv Rev. 2005 Dec 13;57(14):2080-91. Epub 2005 Nov 4. Review.

[Neurochemical evidence to implicate elevated glutamate in the mechanisms of high intraocular pressure \(IOP\)-induced retinal ganglion cell death in rat.](#)

Nucci C, Tartaglione R, Rombolà L, Morrone LA, Fazzi E, Bagetta G.
Neurotoxicology. 2005 Oct;26(5):935-41. Epub 2005 Aug 26.

[Monitoring neurotransmitter release from isolated retinas using online microdialysis-capillary electrophoresis.](#)

O'Brien KB, Esguerra M, Miller RF, Bowser MT.
Anal Chem. 2004 Sep 1;76(17):5069-74.

[Validation of an ocular microdialysis technique in rabbits with permanently implanted vitreous probes: systemic and intravitreal pharmacokinetics of fluorescein.](#)

Anand BS, Atluri H, Mitra AK.
Int J Pharm. 2004 Aug 20;281(1-2):79-88.

[An in vivo microdialysis study of light/dark-modulation of vitreal dopamine release in zebrafish.](#)

Puppala D, Maaswinkel H, Mason B, Legan SJ, Li L.
J Neurocytol. 2004 Mar;33(2):193-201.

[Ocular disposition of novel lipophilic diester prodrugs of ganciclovir following intravitreal administration using microdialysis.](#)

Macha S, Duvvuri S, Mitra AK.
Curr Eye Res. 2004 Feb;28(2):77-84.

[Effect of P-glycoprotein on the ocular disposition of a model substrate, quinidine.](#)

Duvvuri S, Gandhi MD, Mitra AK.
Curr Eye Res. 2003 Dec;27(6):345-53.

[N1-acetyl-N2-formyl-5-methoxykynuramine is a product of melatonin oxidation in rats.](#)

Rozov SV, Filatova EV, Orlov AA, Volkova AV, Zhloba AR, Blashko EL, Pozdeyev NV.
J Pineal Res. 2003 Nov;35(4):245-50.

[Extracellular GABA concentrations in area 17 of cat visual cortex during topographic map reorganization following binocular central retinal lesioning.](#)

Massie A, Cnops L, Smolders I, Van Damme K, Vandenbussche E, Vandesande F, Eysel UT, Arckens L. Brain Res. 2003 Jun 20;976(1):100-8.

[A high-throughput on-line microdialysis-capillary assay for D-serine.](#)

O'Brien KB, Esguerra M, Klug CT, Miller RF, Bowser MT. Electrophoresis. 2003 Apr;24(7-8):1227-35.

[Glutamate levels and transport in cat \(Felis catus\) area 17 during cortical reorganization following binocular retinal lesions.](#)

Massie A, Cnops L, Jacobs S, Van Damme K, Vandenbussche E, Eysel UT, Vandesande F, Arckens L. J Neurochem. 2003 Mar;84(6):1387-97.

[Disposition of short-chain aliphatic alcohols in rabbit vitreous by ocular microdialysis.](#)

Atluri H, Mitra AK. Exp Eye Res. 2003 Mar;76(3):315-20.

[Retinal lesions affect extracellular glutamate levels in sensory-deprived and remote non-deprived regions of cat area 17 as revealed by in vivo microdialysis.](#)

Qu Y, Massie A, Van der Gucht E, Cnops L, Vandenbussche E, Eysel UT, Vandesande F, Arckens L. Brain Res. 2003 Feb 7;962(1-2):199-206.

[Posterior segment ocular pharmacokinetics using microdialysis in a conscious rabbit model.](#)

Dias CS, Mitra AK. Invest Ophthalmol Vis Sci. 2003 Jan;44(1):300-5.

[Ocular penetration of acyclovir and its peptide prodrugs valacyclovir and val-valacyclovir following systemic administration in rabbits: An evaluation using ocular microdialysis and LC-MS.](#)

Dias C, Nashed Y, Atluri H, Mitra A. Curr Eye Res. 2002 Oct;25(4):243-52.

[Ocular disposition of ganciclovir and its monoester prodrugs following intravitreal administration using microdialysis.](#)

Macha S, Mitra AK. Drug Metab Dispos. 2002 Jun;30(6):670-5.

[Ocular pharmacokinetics of cephalosporins using microdialysis.](#)

Macha S, Mitra AK. J Ocul Pharmacol Ther. 2001 Oct;17(5):485-98.

[Microdialysis measurement of ascorbic acid in rabbit vitreous after photodynamic reaction.](#)

Zhang XM, Ohishi K, Hiramitsu T. Exp Eye Res. 2001 Sep;73(3):303-9.

[An in vivo eyecup preparation for the rat.](#)

Pálhalmi J, Szikra T, Kékesi KA, Papp A, Juhász G. J Neurosci Methods. 2001 Feb 15;105(2):167-74.

[Ocular pharmacokinetics in rabbits using a novel dual probe microdialysis technique.](#)

Macha S, Mitra AK.

Exp Eye Res. 2001 Mar;72(3):289-99.

[Microdialysis and drug delivery to the eye.](#)

Rittenhouse KD, Pollack GM.

Adv Drug Deliv Rev. 2000 Dec 15;45(2-3):229-41. Review.

[Ganciclovir delivery through an intravitreal microdialysis probe in rabbit.](#)

Waga J.

Acta Ophthalmol Scand. 2000 Jun;78(3):369-71.

[Pharmacodynamics of beta-blocker modulation of aqueous humor production.](#)

Rittenhouse KD, Pollack GM.

Exp Eye Res. 2000 Apr;70(4):429-39.

[Kinetics of a model nucleoside \(guanosine\) release from biodegradable poly\(DL-lactide-co-glycolide\) microspheres: a delivery system for long-term intraocular delivery.](#)

Chowdhury DK, Mitra AK.

Pharm Dev Technol. 2000;5(2):279-85.

[NGF administered by microdialysis into rabbit vitreous.](#)

Waga J, Ehinger B.

Acta Ophthalmol Scand. 2000 Apr;78(2):154-5.

[Microdialysis for pharmacokinetic studies of ceftazidime in rabbit vitreous.](#)

Waga J, Nilsson-Ehle I, Ljungberg B, Skarin A, Ståhle L, Ehinger B.

J Ocul Pharmacol Ther. 1999 Oct;15(5):455-63.

[Physiology of rat retinal pericytes: modulation of ion channel activity by serum-derived molecules.](#)

Sakagami K, Wu DM, Puro DG.

J Physiol. 1999 Dec 15;521 Pt 3:637-50.

[Mechanism of the pathogenesis of glutamate neurotoxicity in retinal ischemia.](#)

Adachi K, Kashii S, Masai H, Ueda M, Morizane C, Kaneda K, Kume T, Akaike A, Honda Y.

Graefes Arch Clin Exp Ophthalmol. 1998 Oct;236(10):766-74.

[In vivo microdialysis studies of pineal and ocular melatonin rhythms in birds.](#)

Ebihara S, Adachi A, Hasegawa M, Nogi T, Yoshimura T, Hirunagi K.

Biol Signals. 1997 Jul-Dec;6(4-6):233-40. Review.

[Intravitreal concentrations of some drugs administered with microdialysis.](#)

Waga J, Ehinger B.

Acta Ophthalmol Scand. 1997 Feb;75(1):36-40.

[Vitreous disposition of two acycloguanosine antivirals in the albino and pigmented rabbit models: a novel ocular microdialysis technique.](#)

Hughes PM, Krishnamoorthy R, Mitra AK.

J Ocul Pharmacol Ther. 1996 Summer;12(2):209-24.

[Measurement of circadian rhythms of ocular melatonin in the pigeon by in vivo microdialysis.](#)

Adachi A, Hasegawa M, Ebihara S.
Neuroreport. 1995 Dec 29;7(1):286-8.

[Principles of the use of thermal laser photocoagulation in diabetic retinopathy.](#)

Tassignon MJ.
Bull Soc Belge Ophthalmol. 1995;256:73-9.

[Passage of drugs through different intraocular microdialysis membranes.](#)

Waga J, Ehinger B.
Graefes Arch Clin Exp Ophthalmol. 1995 Jan;233(1):31-7.

[Microdialysis measurement of catecholamines in rabbit vitreous after retinal laser photocoagulation.](#)

Stempels N, Tassignon MJ, Sarre S, Nguyen-Legros J.
Exp Eye Res. 1994 Oct;59(4):433-9.

[the "Ulm Zucker Uhr System" and its consequences.](#)

Pfeiffer EF.
Horm Metab Res. 1994 Nov;26(11):510-4.

[\[Regulation mechanism of melatonin rhythm in the pineal gland by light: experimental studies by in vivo microdialysis\].](#)

Kanematsu N.
Hokkaido Igaku Zasshi. 1994 Jan;69(1):46-64. Japanese.

[A removable ocular microdialysis system for measuring vitreous biogenic amines.](#)

Stempels N, Tassignon MJ, Sarre S.
Graefes Arch Clin Exp Ophthalmol. 1993 Nov;231(11):651-5.

[Glutamate release in experimental ischaemia of the retina: an approach using microdialysis.](#)

Louzada-Júnior P, Dias JJ, Santos WF, Lachat JJ, Bradford HF, Coutinho-Netto J.
J Neurochem. 1992 Jul;59(1):358-63.

[Intraocular microdialysis with permanently implanted probes in rabbit.](#)

Waga J, Ohta A, Ehinger B.
Acta Ophthalmol (Copenh). 1991 Oct;69(5):618-24.