

## Clinical science

**Table 4** Analyses of risk factors for blindness after laser photocoagulation using Cox proportional hazard model

Variable	Hazard ratio (95% CI)	p Value
Age at onset (per year)	1.06 (0.97 to 1.15)	0.23
Sex (female/male)	1.25 (0.62 to 2.54)	0.54
Calendar time period of diagnosis (1975–9/1965–9)	0.55 (0.36 to 0.84)	<0.01

In summary, the incidence of blindness has decreased significantly for the subjects observed over time. This decrease might partially be attributed to technical advances in laser photocoagulation.

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## REFERENCES

- Coffey JT, Brandle M, Zhou H, *et al*. Valuing health-related quality of life in diabetes. *Diabetes Care* 2002;**25**:2238–43.
- Hibi I, Tanae A, Isshiki G, *et al*. Juvenile onset insulin dependent diabetes in Japan: Current. *Clinical Endocrinology* 1982;**30**:83–94. [in Japanese]
- The Diabetic Retinopathy Study Research Group. Preliminary report on effects of photocoagulation therapy. *Am J Ophthalmol* 1976;**81**:383–96.
- Ferris F. Early Photocoagulation in patients with either type 1 or type 2 diabetes. *Trans Am Ophthalmol Soc* 1996;**94**:505–37.
- Lövestam-Adrian M, Agardh CD, Torffvit O, *et al*. Diabetic retinopathy, visual acuity and medical risk indicators: a continuous 10-year follow-up study in type 1 diabetic patients under routine care. *J Diabetes Complications* 2001;**15**:287–94.
- Lövestam-Adrian M, Agardh CD, Torffvit O, *et al*. Type 1 diabetes patients with severe non-proliferative retinopathy may benefit from panretinal photocoagulation. *Acta Ophthalmol Scand* 2003;**81**:221–5.
- Diabetes Epidemiology Research International Mortality Study Group. Major cross country differences in risk of dying for people with IDDM. *Diabetes Care* 1991;**14**:49–54.
- Diabetes Epidemiology Research International (DERI) Study Group. International analysis of insulin-dependent diabetes mellitus mortality: a preventable mortality perspective. *Am J Epidemiol* 1995;**142**:612–8.
- Tajima N, LaPorte RE, Hibi I, *et al*. A comparison of the epidemiology of youth-onset insulin-dependent diabetes mellitus between Japan and the United States (Allegheny County, Pennsylvania). *Diabetes Care* 1985;**8**(suppl 1):17–23.
- Tajima N, Kitagawa T, Diabetes Epidemiology Research International Group. Procedures to achieve 97.6% ascertainment of the mortality status of IDDM patients in a nationwide epidemiologic study. *J Jpn Diabetes Soc* 1990;**33**:19–26. [in Japanese]
- Rossing K, Jacobsen P, Rossing P, *et al*. Improved visual function in IDDM patients with unchanged cumulative incidence of sight-threatening diabetic retinopathy. *Diabetes Care* 1998;**21**:2007–15.
- The Diabetic Retinopathy Study Research Group. Photocoagulation treatment of proliferative diabetic retinopathy: Clinical application of diabetic retinopathy study (DRS) findings, DRS Report Number 8. *Ophthalmology* 1981;**88**:583–600.
- Early Treatment Diabetic Retinopathy Study Research Group. Early photocoagulation for diabetic retinopathy. ETDRS Report Number 9. *Ophthalmology* 1991;**98**:766–85.
- Noyori K, Shimizu K, Itoi M, eds. *Laser ophthalmology*. Tokyo: IGAKU-SHOIN, 1983. [in Japanese]
- Novotny HR, Alvis DL. A method of photographing fluorescence in circulating blood in the human retina. *Circulation* 1961;**24**:82–6.
- Hara T, Inami M, Hara T. Efficacy and safety of fluorescein angiography with orally administered sodium fluorescein. *Am J Ophthalmol* 1998;**126**:560–4.
- Zaninetti M, Petropoulos IK, Pournaras CJ. Proliferative diabetic retinopathy: vitreo-retinal complications are often related to insufficient retinal photocoagulation. *J Fr Ophthalmol* 2005;**28**:381–4.
- Machemer R, Buettner H, Norton EW, *et al*. Vitrectomy: a pars plana approach. *Trans Am Acad Ophthalmol Otolaryngol* 1971;**75**:813–20.
- Mario T, Honda K, Usui M, Tano Y, eds. *Practical ophthalmology*. Tokyo: BUNKODO, 2003. [in Japanese]
- The Diabetes Control and Complications Trial Research Group. The relationship of glycemic exposure (HbA1c) to the risk of development and progression of retinopathy in the diabetes control and complications trial. *Diabetes* 1995;**44**:968–83.
- Chaturvedi N, Sjölie AK, Stephenson JM, *et al*. Effect of lisinopril on progression of retinopathy in normotensive people with type 1 diabetes. The EUCLID Study Group. EURODIAB Controlled Trial of Lisinopril in Insulin-Dependent Diabetes Mellitus. *Lancet* 1998;**351**:28–31.

