

TECHNOLOGY

Rheo's clinics to treat seniors' blindness

Blood-filtering procedure to combat 'dry' age-related macular degeneration

Leading Toronto ophthalmologist Jeffrey Machat, whose pioneering research on laser eye surgery helped launch **TLC Vision Corp.** in 1993, is setting up the country's first network of clinics to treat patients at risk of going blind.

His new company, **Rheo Therapeutics Inc.**, will use a new blood-filtering procedure called rheopheresis to combat "dry" age-related macular degeneration or AMD, the leading cause of blindness in seniors.

A TLC spinoff company, **OccuLogix Inc.**, has exclusive rights in North America and the Caribbean for rheopheresis, which uses unique filters to cleanse the blood of compounds believed to cause dry AMD.

OccuLogix plans to sell filters and pumps to physicians for the dialysis-like procedure, which was approved in Canada last year. A final-stage clinical trial is under way in the United States. Analysts predict testing results will be reviewed by regulators at the end of next year, with a possible market launch in 2006.

In an interview, Dr. Machat said he initially plans to open six Rheo clinics across Canada, with the first two opening in Windsor, Ont., and Toronto during the last two weeks of November.

"Rheo is really like the beginnings of laser vision correction and TLC 10 years later," he said, referring to the Mississauga-based company, now the North American market leader in laser eye surgery.

"This procedure will be as well known as [laser eye surgery] in three to five years."

Dr. Machat has attracted some of Canada's leading eye doctors to Rheo Therapeutics, including Howard Gimbel in Calgary, who pioneered modern cataract surgery, and Fouad Tayfour, who established the Windsor Laser Eye Institute in 1991.

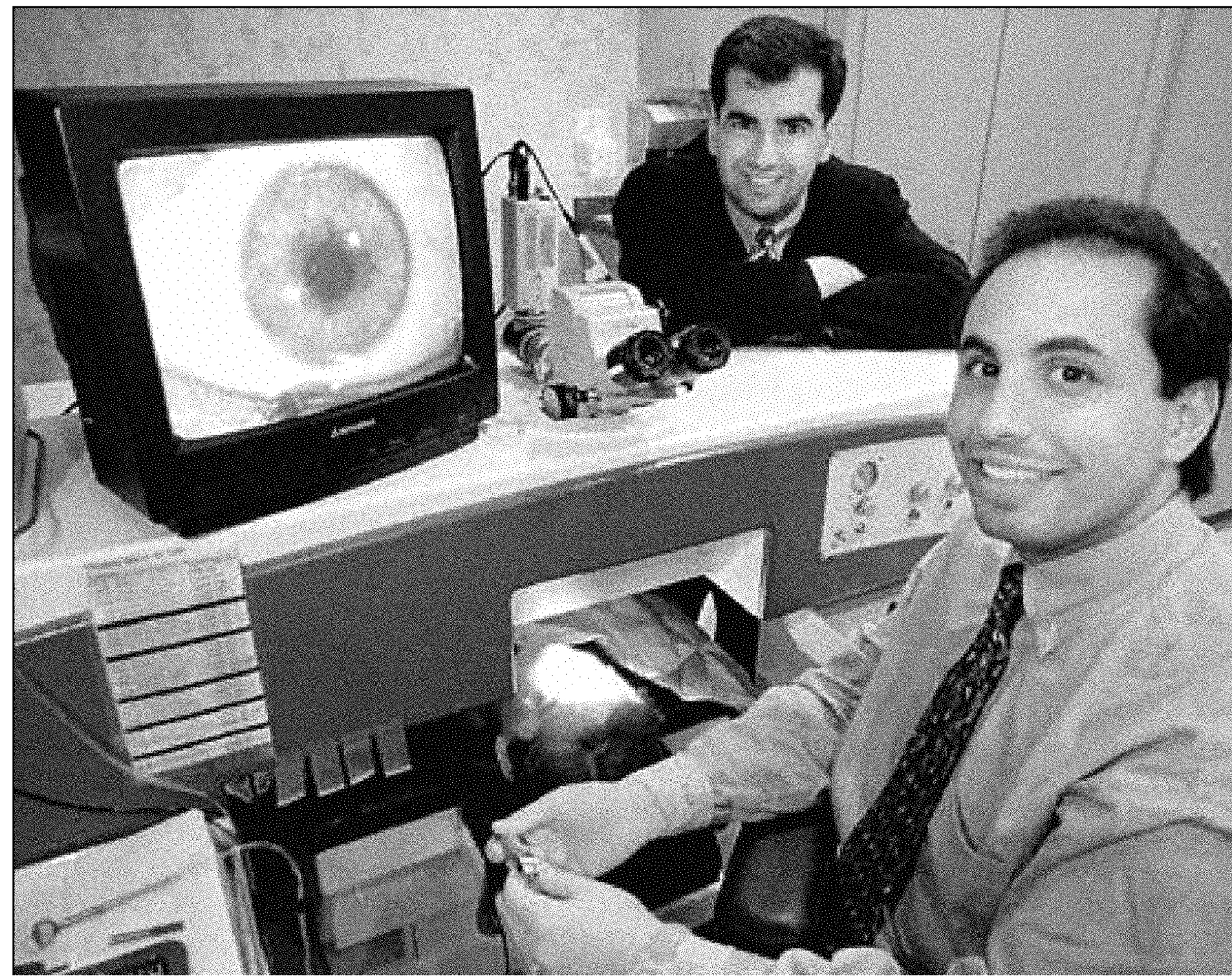
Last month, Rheo Therapeutics raised \$3.65-million in an initial round of venture capital financing. The company also agreed to purchase 8,000 treatment kits from OccuLogix, with an option to purchase up to 2,000 more, and an estimated 20 OctoNovo pumps by the end of 2005, according to OccuLogix's prospectus for an initial public offering.

Pacific International Securities analyst Sheila Broughton said the sales contract advances a revenue stream earlier than expected for OccuLogix and "provides further external validation of the rheopheresis technology."

OccuLogix declined comment because it is in registration for an initial public offering estimated at \$100-million (U.S.) in Canada and the United States.

Dr. Machat, who is now performing laser vision correction surgery only one day a week at TLC's Toronto clinic, said the company aims to treat 200 patients per clinic in the first year. "That's very conservative when there are millions of people with dry AMD."

Patients typically require eight



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Former TLC president Elias Vamvakas, top, and Jeffrey Machat of Rheo Therapeutics. Dr. Machat says he plans to open six Rheo clinics across Canada, with the first two opening in Windsor, Ont., and Toronto.

rheopheresis procedures over a 10-week period. An eight-course treatment is expected to cost \$19,000 (Canadian), he said. The treatment is not reimbursed by provincial health plans.

There is no cure for AMD and nobody knows why blood vessels at

the back of the eye that feed the retina with nutrients through osmosis get blocked up like clogged arteries. As central vision deteriorates, new blood vessels form to feed the retina, but these tend to crack and leak with the onset of wet AMD.

While medical research has

largely focused on treatments for wet AMD, such as QLT Inc.'s drug Visudyne, most people with the disease have early-stage dry AMD.

"Hopefully, rheopheresis will prevent progression of the disease and preserve vision," Dr. Machat said.