Purpose: To evaluate use of intravitreal aflibercept (IVT-AFL) in patients with myopic CNV. Methods: MYRROR is a Phase 3, multicentre, randomised, double-masked, sham-controlled study in which patients with myopic CNV received 1 injection of IVT-AFL 2 mg or sham injection at baseline, followed by monthly assessments until Week 24. At Week 24 patients in the sham arm switched to IVT-AFL 2 mg. Additional injections were allowed if disease persisted/reoccurred. The primary endpoint was the mean change in best-corrected visual acuity at Week 24. Results: 122 patients were randomised to IVT-AFL (n=91) or sham (n=31). Baseline demographics were similar. At Week 24, patients gained 12.1 letters with IVT-AFL and lost 2.0 letters with sham (P<0.0001). By Week 48, patients gained 13.5 and 3.9 letters in the IVT-AFL and ‘sham/IVT-AFL’ groups, respectively (P<0.0001). In the 1st quarter of the study the median number of injections in the IVT-AFL group was 2, for each remaining study quarter (2–4) the median number of injections was 0. In the ‘sham/IVT-AFL’ group the median number of injections in quarter 3 and 4 was 2 and 1, respectively. The incidence of ocular events was similar (37.4% vs 38.7) between groups and the majority were mild. In the study eye, injection related treatment-emergent adverse events predominated. No deaths were reported. Conclusions: IVT-AFL was a well-tolerated and effective treatment for patients with myopic CNV in this study. With few injections, clinically meaningful improvements in visual outcomes were maintained over 48 weeks suggesting that short-term IVT-AFL treatment may benefit many patients with myopic CNV.