Introduction: There is scarce European data about intraocular pressure (IOP)-lowering prescribing patterns. We aimed to describe and discuss the nationwide prescription of these medications in Portugal.

Materials and Methods: Cross-sectional study including all patients who were prescribed at least one IOP-lowering medication in 2015 in Portugal. All ocular hypotensive drug prescriptions were gathered from the common electronic drug prescription system used by all hospitals and clinics in Portugal.

Demographic data, medications prescribed (number and formulation), physician specialty and costs of medications were provided in an encrypted and anonymous form. Statistical analyses were performed using STATA.

Results: A total of 231,634 subjects (57% women), representing 2.2% of the Portuguese population, were prescribed IOP-lowering medications in 2015. Mean age was 72 ± 13 years. General practitioners (GPs) accounted for 52% of all prescriptions. Comparing to ophthalmologists, GPs presented qualitative differences in their prescription pattern, such as a lower tendency for unit doses prescription.

The most prescribed drugs in adult population were latanoprost (28%), timolol/dorzolamide (19%) and brimonidine (14%). Among all, 72% of patients were in monotherapy. Topical IOP-lowering therapy accounted for a total of 26 million euros in costs, shared between patients and the national health system.

Conclusion: A significant percentage of the Portuguese population is currently treated with IOP-lowering medications, the majority of which under monotherapy. Although GPs are responsible for most prescriptions, their prescription pattern is different from the ophthalmologists.

This nationwide study revealed prescription patterns and disclosed the burden of the disease in terms of its medical management.