

Antiangiogenics in Ophthalmology: How Rational and Ethical is the Use?

The quality of scientific data supporting the use of antiangiogénicos (AntiVGEF) in retinal diseases is indisputable.¹ This has resulted in an explosive spread for the three approved indications: macular choroidal neovascular membrane, macular edema in diabetic retinopathy and vein occlusion. There are also large volume of reports of its benefits in almost all neovascular and ischemic diseases of the retina.²

The economic implications for the health sector are important and this explosion have caused concerns in ophthalmologists in many countries and the health authorities have had to take actions on it.

There is an accepted methodology for assessing the cost-benefit of treatment and it has been implemented by NICE (National Institute for Health and Care Excellence)³ of England. The vision years gained with treatment are equated to a quantitative table equivalence of quality. The numerical equivalent of the estimated vision without treatment is subtracted and the estimation of the years gained with treatment life is obtained. (QALY, Quality Adjusted Life of Years). NICE has estimated that in England, the system is able to invest about US \$ 50,000 for each year of life gained with quality treatment. If the equivalence of per capita income and health expenditures is made for Colombia the value could be between US\$7,000 and US\$15.000. When this methodology is applied for most of the treated cases in Colombia, it can be considered that costs are justified by benefits. However in some cases where the benefits are marginal, cost-benefit ratio is not justifiable.

It has been a tradition in medicine that the physician's responsibility is limited to individual action with the patient. Codes of ethics and laws governing the exercise emphasize the personal relationship and the variables that determine it. However, it is increasingly evident that every medical decision has economic implications. To the extent that technology and the diagnostic and therapeutic resources become more sophisticated, the medical act has increasingly impact on the economy of a society. Doctors tend to think that their ethical responsibility is limited only to the individual benefit of each patient and broader economic implications of their decisions do not have to affect them. The truth is that in any society resources for health are limited; therefore, one of the ethical

implications is that resources that are used in a not justified manner on one hand, may not be used in higher return alternative to health outcomes in the other side. Doctors may consider their duty to fight for a patient of 80 years to receive a liver transplant at a cost of US \$ 200,000 for the patient's right to live two or three years. But if the decision means that 20,000 children will not receive a US \$10 vaccine and so 1000 of them get sick and 100 die, the ethical balance is not very positive.

It is essential to disseminate the concept of dual responsibility of the medical act: with the patient and social resources. For decisions that necessarily involve an cost-opportunity : each a decision made is giving up the benefits that would have provided the alternatives. It is therefore necessary to make conscientious, explicit and clear that medical professionals not only decide on the health of patients, but decides on the resources of the health sector and indirectly on the resources of society.

Comparative studies with good level of evidence, aimed to evaluate Avastin vs. Lucentis vs Eylea, have shown no significant differences in either results or side effects. Small differences in some studies, with conflicting differences may invalidate others. In any case, the key question remains if a little difference is found, it may be due to random differences. Only with the selling price of Lucentis in Colombia in 2012, one can calculate that if the treatment had been made with an equivalent cost by 10%, it would have achieved savings of 30,000 million pesos.

The amount of information available is overwhelming and how to interpret it may be subject to bias and commercial influences. Colombia differences in rates of use of

antiangiogenic, by retina specialist and city, suggests that there is no unified scientific criteria or there are factors other than strict medical indication that influence practices.⁵

Therefore the responsibility of ophthalmologists is to do their best to establish guidelines or protocols to guide the management of common diseases with a criterion of cost-

benefit or cost-effective. To pretend that ethics is not to mention money and that commercial influences do not affect doctors, is to bury the head in the ground.

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Oftalmólogo Retinólogo

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Bibliografía

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