health states based on visual acuity (VA): >20/40, 20/40 to
>20/80, 20/80 to >20/200, 20/200 to >20/400, and >20/400. The
model incorporates patients across all lesion subtypes: predom-
inately classic, minimally classic, and occult. All drug and pro-
cedure costs were derived from US published sources, including
Medicare Part B Drugs Average Sales Price and RBRVS. Expert
interviews were conducted to determine adverse events treatment
patterns and vision rehabilitation resource use. Relative risks and
costs associated with effects associated with declining VA
(depression, bone fractures, skilled nursing facilities, and nursing
homes) were extracted from a Medicare analysis. Transition
probabilities were derived from published trial data for both
products for each of the 3-month cycles. Utilities were derived
from similar published sources as previous AMD models. Results
are expressed as vision years, quality-adjusted life years
(QALYs), medical costs and other costs, as well as the average
cost per vision year and QALY gained. RESULTS: For a lifetime
analysis the average cost per vision year was $20,459 for
Macugen and $26,079 for Visudyne and the average cost per
QALY was $19,609 for Macugen and $20,136 for PDT. A
patient treated with Macugen had on average 3.68 vision years
over a lifetime compared to 2.65 for a patient treated with Visu-
dyne. CONCLUSIONS: Macugen treatment produces more
years of sight than Visudyne for AMD treated patients. Macugen
is more cost-effective versus active treatment with Visudyne.
A limitation of the model is the absence of direct clinical compar-
ison between the products.

PEY10 COMBIGAN—COST-MINIMIZATION ANALYSIS OF
BRIMONIDINE/TIMOLOL FIXED COMBINATION IN THE
TREATMENT OF PRIMARY OPEN ANGLE GLAUCOMA

Poulsen PB1, Buchholz P2, Walt J
1MOUSMANN Research & Consulting, Kolding, Denmark; 2Allergan,
Ettlingen, Germany; 3Allergan, Irvine, CA, USA
OBJECTIVES: Many patients suffering from glaucoma find it
necessary to use a second adjunctive topical agent to adequately
reduce the intraocular pressure (IOP). New more convenient
fixed combination products containing two active anti-glaucoma
medications have been developed. The objective of this analysis
is to compare the cost of brimonidine/timolol fixed combination
(Combigan®) with concomitant administration of brimodine
(Aalphagan®) and timolol, dorzolamide/timolol fixed combination
(Cosopt®), and concomitant administration of dorzolamide
(Trusopt®) and timolol. METHODS: RCTs have documented
equivalent safety and efficacy in terms of IOP control of combi-
nation products in comparison with their individual components
(Sall et al., 2003; Solish et al., 2004). A cost-minimization analy-
sis including drug costs and visits at the ophthalmologist was
conducted in whole for UK and other European counties with both a
health care and drug alone perspective. An RCT (Simmons et al.,
2001) has shown that Alphagan+timolol was more effective than
Trusopt+timolol in terms of patients achieving target IOP, there-
fore a cost-effectiveness analysis was constructed for this com-
parison. RESULTS: The 3-months health care costs analysis
(drug alone) in the UK using Combigan was £264.00 (£30.00)
compared with £268.11 (£34.11) for Alphagan+timolol and
£264.15 (£30.15) for Cosopt. With a 12-months perspective,
including additional drug and visits, the health care costs (drug
alone) rose to £510.00 (£120.00) for Combigan compared
with £526.44 (£136.44) for Alphagan+timolol and £510.60
(£120.60) for Cosopt. The cost-effectiveness analysis docu-
mented that Alphagan was more cost-effective than Trusopt
adjunctively. CONCLUSION: Combigan provided better cost
value than Alphagan+timolol adjunctively. The use of Combigan
PEY11 COST-EFFECTIVENESS MODEL FOR AGE-RELATED MACULAR
DEGENERATION: COMPARING EARLY AND LATE MACUGEN
TREATMENT

Earnshaw SR1, Javitt JC2, Zlateva GP3, Pleil AM4, Graham CN1,
Brogan AJ1, Shah SN1, Adams AP6
1RTI Health Solutions, Research Triangle Park, NC, USA; 2Wilmer
Ophthalmological Institute, Baltimore, MD, USA; 3Pfizer Global
Pharmaceuticals, New York, NY, USA; 4Pfizer Incorporated, San Diego,
CA, USA; 5Pfizer, Inc, New York, NY, USA; 6Eyetech Pharmaceuticals,
New York, NY, USA
OBJECTIVE: To compare the cost-effectiveness of early treat-
ment in disease progression of age-related macular degenera-
tion (AMD) to later treatment. A comprehensive model compares
starting treatment with Macugen (pegaptanib sodium), a new
treatment for AMD indicated for all patients with neovascular
AMD and standard care in patients with early disease progress-
ion (i.e., better visual acuity [VA]) versus late disease progress-
ion (i.e., worse VA). METHODS: A Markov framework was
used to model lifetime movement of an AMD cohort through
health states based on VA: >20/40, 20/40 to >20/80, 20/80 to
>20/200, 20/200 to >20/400, and >20/400. Drug and procedure
costs were derived from US published sources. Expert interviews
were conducted to determine adverse events treatment patterns
and vision rehabilitation resource use. Relative risks and costs
associated with effects associated with declining VA were
early derived from published trial data for both products for each
of the 3-month cycles. Utilities were derived from similar pub-
lished sources as previous AMD models. Results are expressed as
vision years, quality-adjusted life years (QALYs), medical
costs, and other costs, as well as the incremental cost per vision
year and QALY gained. Three runs of the model were conducted
with cohorts of patients starting in one of the following health
states: 20/40 to >20/80; 20/80 to >20/200; and 20/200 to
>20/400. RESULTS: For lifetime analysis incremental cost-
effectiveness ratios (ICERs) per vision year gained were $19,744,
$23,377, and $58,512 and ICERs per QALY gained were
$46,911, $67,058, and $135,400 versus standard care for
standard care in patients with early disease progres-
sion states, respectively.

PEY12 PHARMACOECONOMIC ANALYSIS OF LATANOPROST
VERSUS DORZOLAMIDE/TIMOLOL IN THE TREATMENT
OF OPEN-ANGLE GLAUCOMA IN SPAIN

Ortega P, Soto J, Fernández-Arias I, De Miguel V
Pfizer Spain, Alcobendas, Madrid, Spain
OBJECTIVE: To estimate the efficiency of latanoprost against
the fixed-combination of dorzolamide/timolol in treating
patients with glaucoma in Spain. METHODS: A cost-minimiza-
tion analysis was carried out by building a decision analytical
model, because the effectiveness of both therapeutic options
in lowering intraocular pressure (IOP) was similar in a per-
formed systematic review of the literature. However, dorzo-
lamide/timolol was associated with a higher incidence of adverse
events and patient withdrawals. Health care resource utilization was taken from published clinical trials measuring IOP-lowering of alternatives under evaluation and a local expert panel. Only direct medical costs were included in the model (drug acquisition, diagnostic procedures, ophthalmologist visits and treatment of withdrawals as second-line therapy). Drug acquisition cost data were obtained from official sources while the rest of costs data were taken from a national health care costs database. The perspective selected for this analysis was the Spanish National Health Service and the time horizon chosen was for three months, the time that patients were followed-up in most of the reported clinical trials. RESULTS: Cost per patient associated with the use of latanoprost was of €281, with an incremental cost of €2 per patient treated. CONCLUSIONS: Despite Latanoprost acquisition is bigger, it is a more cost-effective alternative than the fixed-combination of dorzolamide/timolol because produces similar clinical results with lower global associated costs. Therefore, latanoprost should be a therapeutic option to choose rather than dorzolamide/timolol in the treatment of open-angle glaucoma in Spain.

COSTS AND CONSEQUENCES OF ENDOPTHALMITIS: RESULTS FROM THE NATIONAL ENDOPTHALMITIS SURVEY
Berdeaux G1, Salvanet-Bouccara A2, Grillon S3, Lafuma A4, Deschaseaux-Voinet C5
1Alcon France SA, Rueil-Malmaison, Hauts de Seine, France; 2CHR Villeneuve Saint Georges, Villeneuve Saint Georges, Val de Marne, France; 3Cemka Eval, Bourg-la-Reine, Hauts de Seine, France
OBJECTIVE: Endophthalmitis is the most severe infection following eye trauma (injury, surgery, injection, etc.). Medical costs and visual loss consequences are compared here. METHODS: A mailing announcing the creation of the National Endophthalmitis Survey was sent to all French ophthalmologists. A total of 424 replies were received and 346 (82%) were positive. A standardized anonymous questionnaire collected information on the operative conditions, endophthalmitis characteristics, treatments and clinical outcomes. The economic point of view was that of the French NHS and medical costs were extracted from the national Diagnosis Related Group database. Utility related to visual acuity loss was estimated from the literature (Brown). A €50,000/QALY threshold was used to assess cost-effective social value related to vision loss. A 5% discount rate was used. RESULTS: Information on 88 cases of endophthalmitis was collected. The mean age was 75.1 years and 44% were women. All patients were hospitalized, had bacteriological samples, and were treated with either systemic or intra-vitreal antibiotics. 23.1% had a vitrectomy. Complications were reported in 23.1% and mostly were mainly retinal detachments. 3 months after surgery, 30.4% of the eyes had a visual acuity (VA) less than 1/20 and in 57.4% VA was less than 5/10. The average endophthalmitis medical cost was €4125. The loss in utility was 0.203 on average (baseline VA fixed at 8/10). With a life expectancy of 5 years, the average discounted social value of endophthalmitis vision loss was €46,000. CONCLUSION: The social value attributable to vision loss subsequent to endophthalmitis is more than ten times higher than its medical cost.

IMPACT OF VISUAL ACUITY ON MEDICAL AND NON-MEDICAL COSTS IN PATIENTS SUFFERING FROM WET AGE-RELATED MACULAR DEGENERATION IN FRANCE, GERMANY AND ITALY
Benhaddi H1, Hieke K2, Negrini C3, Priol G4, Berdeaux G5, Le Pen C1
1Arencis, Neuilly sur Seine, Hauts de Seine, France; 2Neos Health, Binningen, Switzerland; 3PBE-Consulting, Verona, Italy; 4Alcon France SA, Rueil-Malmaison, Hauts de Seine, France
OBJECTIVE: To evaluate the impact of best and worst eye visual acuity (VA) on the consumption of medical and non medical resources in patients with wet Age-Related Macular Degeneration (AMD). METHODS: This study conducted in France, Germany and Italy was cross-sectional with some data collected retrospectively. Patients with an exudative AMD form were included and were stratified into four levels of severity using two VA thresholds, 20/200 for the worst eye (WE) and 20/40 for the best eye (BE). In addition to demographics, AMD description and VA data, the medical and non-medical resources used for AMD reasons during the previous year were collected. Costs were assessed for each country according to a global payer perspective. An analysis of variance was performed on cost variables to estimate the impact of each eye adjusted by sex, age and country. RESULTS: 360 patients were included with a majority of females (60%). Mean age at inclusion was 77 years and time since diagnosis 2.3 years. 27% of patients had BE >20/40 and WE >20/200 and 25.5% BE <20/40 and WE <20/200. Total costs were €3923.5 with 64.5% of medical costs and 35.5% of non-medical costs. Total costs increased with the AMD severity with a cost for the more severe group 1.5 times higher than for the less severe group. Costs were mainly associated with the BE VA. Medical cost was higher in France (€3714 versus €1900 on average in Germany and Italy). It increased slightly between less severe and more severe AMD. Non medical cost was significantly higher for patients with more severe disease and higher in Germany compared to the two other countries. CONCLUSION: This study shows the high impact of AMD on costs and the positive correlation between costs and AMD severity. Non medical costs of the most severe patients equaled medical costs.

OBJECTIVE: To estimate the number of patients with endophthalmitis hospitalized in France, its average cost and hospital financing consequences. METHODS: The French PMSI (Programme de Médicalisation des Systèmes d’Information) 2003 database was analysed. Patients with the following principal diagnoses were extracted: “purulent endophthalmitis”, “other endophthalmitis”, and “endophthalmitis associated with another disease”. Two mean lengths of stay (LoS) were compared: the overall patient sample and the DRG-weighted estimate. Endophthalmitis costs were estimated as the sum of weighted average DRG costs plus length of stay multiplied by hospital variable costs. RESULTS: 1681 endophthalmitis cases were reported (age 66.7, 50% male), 1449 cases (86.2%) were in the public sector and 2.8% were ward transfers. A total of 221 (13.1%) had a vitrectomy, the most common endophthalmitis-related surgery. A total of 85 (5.1%) required a ward transfer and 4 (0.2%) died. The patient LoS was 7.6 days on average while the DRG weighted LoS was 4.3 days. Thus, the PMSI underestimates endophthalmitis LoS by 3.3 days. Mean