

retreatment regimens, which allows continuous or paused therapeutic schemes. This study aims to perform cost-effectiveness and cost-utility analyses of biologic alternatives for moderate to severe psoriasis in Venezuela, from a public payer's perspective. **METHODS:** A decision-tree model simulates psoriasis evolution after treatment with etanercept continuous (50mg twice a week for 12 weeks, followed by 25mg twice a week) or paused (12-week treatment cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, then 40mg every 2 weeks), infliximab (5 mg/kg at weeks 0, 2 and 6, then every 8 weeks) or ustekinumab (45mg in weeks 0 and 4, then 45mg every 12 weeks) and their associated costs in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALY) gained. Costs included biologicals, medical follow-up and adverse events management, from Venezuela official databases (values represented 2010 USD). Probabilistic sensitivity analyses were performed through Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. **RESULTS:** Effectiveness resulted in [PASI 75, QALY]: etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339], infliximab [37.2%, 1.5001] and ustekinumab [43.6%, 1.5164]. Treatment costs [continuous, paused] were [16,741USD, 15,692USD], [17,846USD, 19,742USD], [35,685USD, 33,980USD] and [27,569USD, 26,922USD], respectively. Etanercept represented the least costly in all comparisons. Acceptability curves showed etanercept in continuous and paused schemes as the most cost-effective biologic. **CONCLUSIONS:** In this analysis, due to its lower costs and favorable effectiveness profile, etanercept showed to be cost-saving in both continuous and paused treatment schemes regarding PASI 75 success rate and QALY's gained.

PSS13

ECONOMIC ANALYSIS OF ETANERCEPT AS CONTINUOUS OR PAUSED THERAPY IN MODERATE TO SEVERE PSORIASIS FROM A PUBLIC PERSPECTIVE IN ARGENTINA

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OBJECTIVES: Regarding biological drugs approved for psoriasis in Argentina, etanercept effectiveness is not lost in retreatment regimens, which allows continuous or paused therapeutic schemes. This study aims to perform cost-effectiveness and cost-utility analyses of biologic alternatives for moderate to severe psoriasis in Argentina, from a public payer's perspective. **METHODS:** A decision-tree model was used to simulate etanercept continuous (50mg twice a week for 12 weeks, followed by 25mg twice a week) or paused (12-week cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, and then 40mg every two weeks) or infliximab (5 mg/kg at weeks 0, 2 and 6 and then every 8 weeks) in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALYs) gained. Costs included biologicals, medical follow-up and adverse events management from Argentina official databases (values represented in 2010 USD). Probabilistic sensitivity analyses were performed through Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. **RESULTS:** Effectiveness resulted in [PASI 75, QALY]: etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339] and infliximab [37.2%, 1.5001]. Treatment costs [continuous, paused] were [45,683USD, 35,420USD], [44,467USD, 45,123USD], [60,359USD, 58,335USD] and [42,818USD, 43,306USD], respectively. In continuous scheme etanercept saved 14,678USD when compared to infliximab. In paused scheme, etanercept represented the least costly treatment in all comparisons: 14,306USD and 47,211USD less than adalimumab and infliximab, respectively. Acceptability curves showed etanercept paused as the most cost-effective biologic. **CONCLUSIONS:** In this analysis, etanercept presented the greatest effectiveness in continuous and paused therapeutic schemes. Due to its lower costs in paused scheme scenario, etanercept showed to be cost-saving regarding PASI 75 success rate and QALY's gained.

PSS14

ECONOMIC ANALYSIS OF ETANERCEPT AS PAUSED THERAPY IN MODERATE TO SEVERE PSORIASIS FROM A PUBLIC PERSPECTIVE IN BRAZIL

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OBJECTIVES: Biologic treatment after systemic drugs fail in psoriasis is indicated for obtaining clinical response, but not yet available in the Brazilian public health care system. Etanercept effectiveness is not lost in retreatment regimens, which allows continuous or paused therapeutic schemes. This study aims to perform cost-effectiveness and cost-utility analysis of biologic alternatives for moderate to severe psoriasis in Brazil, from a public payer's perspective. **METHODS:** A decision-tree model simulates psoriasis evolution after treatment with etanercept paused (50mg twice a week for 12 weeks, followed by 25mg twice a week; 12-week treatment cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, and then 40mg every two weeks), infliximab (5mg/kg at weeks 0, 2 and 6 and then every 8 weeks) or ustekinumab (45mg in weeks 0 and 4, then 45mg every 12 weeks) and their associated costs in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALY) gained. Costs included biologicals, medical follow-up and adverse events management, collected from Brazil public official databases (values represented 2010 USD). Probabilistic sensitivity analyses were performed through Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. **RESULTS:** Effectiveness resulted in [PASI 75,

QALY] etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339], infliximab [37.2%, 1.5001] and ustekinumab [43.6%, 1.5164]. Treatment costs were 28,051USD, 35,001USD, 35,987USD and 40,183, respectively, and etanercept represented the least costly in all comparisons: 6,951USD, 7,937USD and 12,132USD less than adalimumab, infliximab and ustekinumab, respectively. Acceptability curves showed etanercept paused as the most cost-effective biologic. **CONCLUSIONS:** In this analysis, etanercept in paused therapeutic scheme presented the greatest effectiveness. Due to its lower costs, etanercept showed to be cost-saving regarding PASI 75 success rate and QALY's gained.

PSS15

ECONOMIC ANALYSIS OF ETANERCEPT AS CONTINUOUS OR PAUSED THERAPY IN MODERATE TO SEVERE PSORIASIS FROM A PUBLIC PERSPECTIVE IN COLOMBIA

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OBJECTIVES: Biologic treatment in psoriasis is indicated for obtaining clinical response after systemic drugs fail. Among those approved in Colombia, etanercept effectiveness is not lost in retreatment regimens, which allows continuous or paused therapeutic schemes. This study aims to perform cost-effectiveness and cost-utility analysis of biologic alternatives for moderate to severe psoriasis in Colombia, from a public payer's perspective. **METHODS:** A decision tree-model simulates psoriasis evolution after treatment with etanercept continuous (50mg twice a week for 12 weeks, followed by 25mg twice a week) or paused (12-week treatment cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, then 40mg every two weeks), infliximab (5mg/kg at weeks 0, 2 and 6, then every 8 weeks) or ustekinumab (45mg in weeks 0 and 4, then 45mg every 12 weeks) and their associated costs in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALY) gained. Costs included biologicals, medical follow-up and adverse events management, collected from Colombia official databases (values represented 2010 USD). Probabilistic sensitivity analyses were performed through Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. **RESULTS:** Effectiveness resulted in [PASI 75, QALY] etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339], infliximab [37.2%, 1.5001] and ustekinumab [43.6%, 1.5164]. Treatment costs [continuous, paused] were [45,683USD, 35,420USD], [44,467USD, 45,123USD], [60,359USD, 58,335USD] and [42,818USD, 43,306USD], respectively. In continuous scheme etanercept saved 14,678USD when compared to infliximab. In paused scheme, etanercept represented the least costly in all comparisons. Acceptability curves showed etanercept paused as the most cost-effective biologic. **CONCLUSIONS:** In this analysis, etanercept presented the greatest effectiveness in all therapeutic schemes. Due to its lower costs in paused scenario, etanercept showed to be cost-saving regarding PASI 75 success rate and QALY's gained.

PSS16

SYSTEMATIC REVIEW OF COST-UTILITY ANALYSES IN AGE-RELATED MACULAR DEGENERATION

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OBJECTIVES: Age-related macular degeneration (AMD) is the primary cause of vision loss among older Americans and results in significant cost and reduced quality of life. This study reviewed the methodology and results of published cost-utility analyses (CUA) in AMD treatments. **METHODS:** We identified AMD-related CUAs published from 2000 through 2010 using the Tufts Medical Center Cost-Effectiveness Analysis Registry (www.cearegistry.org), which contains detailed information on more than 2,600 CUAs. In addition to the standard auditing process, we recorded model structure, cost and effectiveness inputs, and assumptions employed in the models. **RESULTS:** We identified 26 AMD-related CUAs containing 55 standardized incremental cost-effectiveness ratios (ICERs, expressed as \$US2010 per QALY) and 82 utility weights. The most common type of intervention was pharmaceuticals (pegaptanib, ranibizumab, bevacizumab, vitamin therapy and/or antioxidants), followed by medical procedures (laser photocoagulation, photodynamic therapy with verteporfin). Approximately 55% of the reported ICERs were either dominant (less expensive and more effective) or below \$50,000 per QALY gained. Most of the CUAs used Markov modeling over a lifetime horizon and estimated ICERs from payer's perspective. Vision acuity was typically modeled with static rather than dynamic states. Most CUAs extrapolated effectiveness data beyond the timeframe of clinical trials by using the "last-observation-carried forward" approach. Most studies considered binocular AMD, but only considered the treatment, monitoring, and utility weight of the better-seeing eye. Key drivers of ICERs included the clinical efficacy of treatment, utility weights, time horizon, and discount rate. **CONCLUSIONS:** CUAs in AMD therapies suggest good value in many cases, but great variations exist in the cost-effectiveness of AMD interventions, as well as methods and assumptions employed in the CUA models. Few studies modeled both the better-seeing and worse-seeing eyes among AMD patients. Future research is needed to better understand the cost-effectiveness of treating bilateral AMD based on longer-term data.