To estimate the budget impact of introducing Rosuvastatin into the current Brazilian national drug formulary. **METHODS:** A Monte Carlo simulation was used to analyze the costs and consequences of treatment with rosuvastatin and atorvastatin. The effectiveness of statins in low-density lipoprotein (LDL) reduction was obtained using clinical data from published systematic review. We used the log-normal distribution for costs using government prices (in Brazilian reais -BRL). The temporal horizon used is 1 year. Using the Healthcare System database we described the evolution of consumption of statins in Brazilian Health System. Univariate and probabilistic sensitivity analysis tested model robustness. **RESULTS:** The Rosuvastatin is cost saving when compared to atorvastatin, (BRL\$215,46 per patient), having an incremental cost-effectiveness ratio (ICER) of BRL\$116,84. These results are expected, as rosuvastatin is cheaper and more efficacious than atorvastatin. For a willingness to pay of BRL\$30,00/percentual reduction in LDL, rosuvastatin 10 **mg should be chosen as** more cost-effective in 75% of the cases when compared to atorvastatin 20 **mg. The** budget impact analysis showed that introduction Rosuvastatin into formulary drug could generate minimum savings of the total budget BRL \$10 millions/year (US\$4.18 millions dollars). **CONCLUSIONS:** The Rosuvastatin is the statin more cost-effective than Atorvastatin in treatment of hypercholesterolemia to patients that need high reduction in LDL. Their inclusion into Brazilian National Drug Formulary is cost saving and is aligned with the health authority strategy of cost containment or reduction for this class of medicines.

CS8

THE ECONOMIC BURDEN OF GAUCHER AND FABRY'S DISEASE IN COLOMBIA. IMPLICATIONS FOR NATIONAL HEALTH INSURANCE

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OBJECTIVES: Type I Gaucher's disease (GD) and Fabry's disease (FD) are rare genetic disorders which in their severest form cause great disability or may be life threatening. Treatment for these conditions includes costly enzyme replacement therapy (ERT) with uncertain evidence of effectiveness. With increasing frequency ERT has been financed with National Health Insurance funds in response to court rulings. This study seeks to estimate the economic burden of GD and FD for Colombian society. **METHODS:** We developed a stochastic, discrete event simulation model of the natural history of these diseases with and without ERT and their respective direct and indirect costs during a 15 year period (2008–2022) for a hypothetic cohort of patients. Model parameters were obtained from secondary data from local and international sources, expert opinion and administrative cost databases from a national health insurance plan. One-way sensitivity analyses included scenarios with different population disease prevalence and ERT dosage. **RESULTS:** In the best scenarios the 15-year total cost of the cohort is between USD\$319 and 533 million for GD and between US\$84 and 92 million for FD. Costs of ERT represent more than 95% of total cost. For the year 2008 the annual cost of ERT per patient for either disease was around US\$175,000. **CONCLUSIONS:** A decision to finance ERT for these diseases with public funds would require an amount of resources that exceeds by far the available budget and would imply not providing treatment for other diseases. Given that a recent Constitutional Court ruling mandates reforms to the Colombian benefits packages and their rationing mechanisms, our results highlight the importance of economic evaluation for sound decision making. Development and enforcement of national treatment guidelines for rare diseases is needed. Financing policies should be coherent with the objective of providing comprehensive and effective services within health sector budget constraints.

PODIUM SESSION II: COST STUDIES III

CS9

ESTIMATION OF THE BURDEN OF CARDIOVASCULAR DISEASE ATTRIBUTABLE TO MODIFIABLE RISK FACTORS AND COST-EFFECTIVENESS ANALYSIS OF PREVENTIVE INTERVENTIONS TO REDUCE THIS BURDEN IN ARGENTINA

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OBJECTIVES: Chronic diseases account for 50% of the burden of disease (BoD) in Argentina, and cardiovascular diseases (CVD) represent 30% of deaths and 13% of YLL. The aim of this study was to develop a model to estimate the burden of CVD attributable to risk factors (RF), costs, and cost-effectiveness (CE) of different interventions to reduce CVD **METHODS:** Selected CVRF(high blood pressure (HBP), high cholesterol, high glycemia, overweight, smoking, sedentary style, and unhealthy diet), were taken from each of the 50,000 individuals included in the Argentine Risk Factor Survey database, and entered into a simulation model with their relative risks for coronary heart disease and stroke. Six individual interventions (treatment of HBP, hypercholesterolemia, smoking cessation and polypill-like therapy to 3 different risk groups) and two population interventions (reduction of salt in bread and media campaign against tobacco) were selected. Estimates of effectiveness of the interventions

were used to predict their impact in DALY's saved. Costs of acute CHD and stroke events were measured in Argentine pesos. ICERs were discounted at an annual rate of 3%. Probabilistic sensitivity analysis and acceptability curves were used as needed **RESULTS:** More than 80% of the events were attributable to these selected CVRF. Two interventions were cost-saving: reducing salt in bread and polypill treatment to high CV risk subjects, the latter with a reduction of 5% of BoD. Two interventions had acceptable ICER: HBP treatment (\$4509/DALY saved) and anti-tobacco campaign (\$4939/DALY saved). Cholesterol lowering with atorvastatin (\$61,000/DALY saved) and tobacco-cessation with bupropion (\$92,000/DALY saved), showed less favorable ICER. **CONCLUSIONS:** Most of these interventions seem to be feasible and cost-effective. Taking into account that CVD is the leading cause of BoD in Argentina, interventions to reduce it should be prioritized. This model aims to help policy makers to make informed resource-allocation decisions to reduce CVD in Argentina.

CS10

ANÁLISIS DE COSTO EFECTIVIDAD Y COSTO UTILIDAD DEL INTERFERÓN BETA-1B (INFB1B) FRENTE A INTERFERÓN BETA-1A (INFB1A) PARA EL TRATAMIENTO DE ESCLEROSIS MÚLTIPLE REMITENTE RECIDIVANTE EN COLOMBIA

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OBJETIVOS: Realizar un analisis de costo efectividad de INFβ1b frente a INFβ1a en el tratamiento de pacientes con Esclerosis Multiple (EM) remitente recidivante en Colombia. **METODOLOGÍAS:** Se utilizo un modelo de Markov para simular una cohorte de pacientes de ambos generos recien diagnosticados de EM remitente recidivante analizados por fases de progresion de la enfermedad (EDSS) y la presentacion de recaidas. Se usaron las probabilidades de transicion, tasas de desercion y utilidades usadas por Prosser (2004). Los costos se analizaron desde la perspectiva del tercero pagador y corresponden a la informacion presentada en un estudio de costos para Colombia en el 2008. Se analizaron tres desenlaces: muertes, recaidas evitadas y QALY. **RESULTADOS:** El costo no descontado de tratar una mujer en el brazo con INFβ1a,fue de \$394,356,043 (U\$ 200,475) frente a \$350,546,892 (U\$178,204) en el brazo tratado con INFβ1b, para un hombre fue de \$363,693,465 (U\$184,887) y \$326,755,523 (U\$ 166,109) respectivamente. Las recaidas con INFβ1a para un hombre fueron de 16.84 y 15.96 en INFβ1b, en una mujer 19.66 y 18.72 respectivamente. Al aplicar las tasas de descuento, el brazo tratado con INFβ1b es menos costoso y mas efectivo frente al tratado con INFβ1a, siendo dominante para las recaidas evitadas tanto en hombres como en mujeres. Se hizo analisis de sensibilidad que presenta resultados similares. Las utilidades y muertes no presentaron diferencias importantes entre los dos medicamentos. **CONCLUSIONES:** En Colombia es recomendable el uso de INFβ1b frente a INFβ1a en pacientes con EM RR dados los supuestos del caso base teniendo en cuenta los desenlaces analizados.

CS11

COST-EFFECTIVENESS OF SELECTIVE SEROTONIN REUPTAKE INHIBITORS IN THE TREATMENT OF MAJOR DEPRESSION IN MEXICO

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OBJECTIVES: Prevalence of major depressive disorder (MDD) in Mexico has been estimated from 7% to 12%. Depression can be treated in a variety of ways, particularly with medication and counseling. Selective serotonin reuptake inhibitors (SSRIs) appear to be the most widespread used antidepressants; besides, SSRIs are similar in efficacy to the older tricyclic antidepressants (TCAs), but with fewer side effects. The objective of this analysis is to assess the cost-effectiveness of SSRIs in the treatment of major depressive disorder in Mexico from the health care payer's perspective. **METHODS:** A cost-effectiveness analysis was developed using a decision-tree model that simulates costs and effectiveness outcomes in a 12- month period. The effectiveness measure was the percentage of patients who experience remission from the depressive disorder. The comparators were citalopram 20 **mg, flouxetine 20 mg, esci-**talopram 10 **mg, paroxetine 20 mg, and sertraline 20 mg. Resource use and cost data** were obtained from a panel of experts and official institutional databases from the Mexican Social Security Institute (IMSS). Effectiveness data and model transition probabilities were obtained from international published literature. Sensitivity analyses were performed to determine the results robustness. **RESULTS:** The estimated effectiveness rate was 64.9% for citalopram and fluoxetine compared to 79.6% for escitalopram, paroxetine, and sertraline. Average expected total direct costs per patient were lower for sertraline \$2735.15 versus \$2862.56 paroxetine, \$3221.18 escitalopram, \$3804.36 fluoxetine and \$4110.70 citalopram. **CONCLUSIONS:** Sertaline is the most cost-effective selective serotonin reuptake inhibitor, among the comparators, for the treatment of major depression in Mexico from the health care payer's perspective.

CS12

IMPACTO EPIDEMIOLÓGICO Y ECONÓMICO DE LA INTRODUCCIÓN DE LA VACUNA DE HEPATITIS A EN COLOMBIA

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OBJETIVOS: Estimar la carga de enfermedad por hepatitis A en Colombia en el 2007, y modelar el impacto epidemiológico y económico de la introducción de la vacuna de hepatitis A. **METODOLOGÍAS:** Estimación epidemiológica basada en una