

## Supplementary Materials

**Table IV. Unit costs**

	Units	Cost
<b>Study drugs</b>		
Alemtuzumab, 10mg/mL, 1.2mL vial	Vial	\$ 11,964.00
Fingolimod 0.5 mg per capsule, 28 capsules	Capsule	\$ 129.83
Teriflunomide 14 mg	Tableta	\$ 79.12
IFN $\beta$ -1a sc (Rebif)	Vial	\$ 435.00
IFN $\beta$ -1a im (Avonex)	Vial	\$ 259.22
Ocrelizumab	Vial	\$ 7,000.00
<b>Study drugs administration costs</b>		
<b>Alemtuzumab</b>		
Aciclovir 400mg x 30 days (antiviral)	Administration	\$ 24.90
Metilprednisolona 1gr IV (premedication) x 3 days por cycle	Administration	\$ 161.11
Emergency Observation Room (6 hours)	Administration	\$ 40.20
<b>Ocrelizumab</b>		
Metilprednisolone 100 mg IV 30 minutes before perfusion	Administration	\$ 10.33
Difenhidramine 50 mg iv 30-60 minutes before perfusión	Administration	\$ 0.47
Acetaminohen 1 gram before perfusion	Administration	\$ 0.21
Emergency Observation Room (6 hours)	Administration	\$ 40.20
<b>Fingolimod</b>		
Electrocardiogram (first three administrations)	Adminitstration	\$ 16.75
Emergency Observation Room (6 hours)	Adminitstration	\$ 40.20
<b>Disease management &amp; risk minimization plan</b>		
<b>Medical consultation</b>		
Specialized Consultation (Neurologist, Ophthalmology, Psychology, Cardiology)	each visit	\$ 20.58
<b>Tests</b>		
Anti TSH Receptor	Per procedure	\$ 38.00
Diagnóstico diferencial por Hepatitis	Per procedure	\$ 60.67
Differential diagnosis for Hepatitis	Per procedure	\$ 17.64
Differential diagnosis for HIV	Per procedure	\$ 8.38
Differential Diagnosis for Human Papilloma	Per procedure	\$ 37.76
Electrocardiogram	Per procedure	\$ 16.75
General Urine Test	Per procedure	\$ 3.23
Liver function	Per procedure	\$ 30.30
Renal function	Per procedure	\$ 11.24
Thyroid function	Per procedure	\$ 17.52
Hematic Biometry	Per procedure	\$ 4.26
Pregnancy Test (Sub U Beta HCG)	Per procedure	\$ 7.95
Subcutaneous test for BCG immunization	Per procedure	\$ 2.79
Magnetic Resonance	Per procedure	\$ 197.48
Transaminases (SGOT / AST & SGPT / ALT)	Per procedure	\$ 6.70
IgG, IgA, IgM titers	Per procedure	\$ 5.26

Source: *Tariff of benefits for the National Health System 2014 (MSP)*

*Drug ceiling price list 10/02/18 (National Council for Setting and Reviewing Prices of Medicines for human use and consumption)*

**Table V. Unit Costs (usd)**

	Units	Cost
<b>Adverse Events</b>		
<b>Medical consultation</b>		
General emergency consultation	Per consultation	\$ 24.26
<b>Hospital stay</b>		
Hospitalization in unit	Per day	\$ 82.08
<b>Tests</b>		
Diagnostic biopsy	Per procedure	\$ 26.45
Blood count	Per procedure	\$ 4.16
Nuclear magnetic resonance (NMR)	Per procedure	\$ 197.48
<b>Treatments</b>		
Acetaminophen 500mg (analgesic)	Per day qid	\$ 0.20
Acyclovir 400mg (antiviral)	Per day qid	\$ 3.32
Amoxicillin 500mg (antibiotic)	Per day tid	\$ 0.69
Ceftriaxone 1 g (antibiotic)	Per day bid	\$ 16.32
Cyclophosphamide 1 g (antibiotic)	Per day	\$ 17.77
Ciprofloxacin 500 mg (antibiotic)	Per day bid	\$ 1.78
Codeine 10 mg (antitussive)	Per day tid	\$ 1.38
Fexofenadine 120mg (antihistamine)	Per day	\$ 1.21
Hydrocortisone 100 mg IV (Corticosteroid)	Per day	\$ 2.92
Ibuprofen 400mg (anti-inflammatory)	Per day tid	\$ 1.20
Levothyroxine 0.1mg (Thyroid hormone)	Per day	\$ 0.01
Loratadin 10 mg tablets	Per day	\$ 0.14
Methylprednisolonw 1000mg IV (Corticosteroid)	Per day	\$ 53.70
Benzathine Penicilin 2,400,000 units	One dose	\$ 2.05
Prednisolone 5mg (Corticosteroid)	Per day	\$ 0.17
Prednisone 20 mg tablets (corticoid)	Per day tid	\$ 1.77
<b>Relapses management</b>		
<b>Medical consultation</b>		
Neurologist	Per consultation	\$ 20.58
Technicians (Physical therapy, visual, urology)	Per consultation	\$ 10.28 *
Ophthalmology, Urology, Physiatry	Per consultation	\$ 22.79
<b>Hospital Stay</b>		
Emergency room	Per day	\$ 24.12
Hospitalization	Per day	\$ 82.08
Intensive Care Unit (ICU)	Per day	\$ 256.07
<b>Tests</b>		
Campimetry	Per procedure	\$ 42.55
General urine test	Per procedure	\$ 3.23
Blood Count	Per procedure	\$ 4.16
Chest x-ray	Per procedure	\$ 13.34
Nuclear magnetic resonance (NMR)	Per procedure	\$ 197.48
Urine culture	Per procedure	\$ 18.88
<b>Drugs</b>		
Immunoglobulin 6g (Biologic)	Per day	\$ 673.32
Methylprednisolone 1000mg IV (Corticosteroid)	Per day	\$ 53.70
Plasmapheresis	Per day	\$ 407.63

\* Service not included in the tariff list. Assumption: 50% of the specialist consultation cost.

Source: *Tariff of benefits for the National Health System 2014 (MSP)*  
*Drug ceiling price list 10/02/18 (National Council for Setting and Reviewing Prices of Medicines for human use and consumption)*

**Table VI. Risk Management Plan Unit Costs (usd)**

Disease-modifying therapy	Resources	Period	Cost
<b>Alemtuzumab</b>	Blood count monthly	First year	\$ 49.92
	Differential diagnosis for Hepatitis	First year	\$ 60.67
	Differential diagnosis for Varicella Zoster	First year	\$ 17.64
	Differential diagnosis for tuberculosis	First year	\$ 2.43
	Differential diagnosis for HIV	First year	\$ 8.38
	Differential diagnosis for Human Papilloma	First year	\$ 37.76
	Neurologist consultation quaterly	First year	\$ 82.32
	Liver function monthly	First year	\$ 363.60
	Thyroid function quaterly	First year	\$ 70.08
	Renal function quaterly	First year	\$ 44.96
	General urine test monthly	First year	\$ 38.76
	MNR biannual	First year	\$ 394.96
	Dermatologist consultation annual (not mandatory)	First year	\$ 20.58
	Blood count monthly	Año 2, 3, 4 y 5	\$ 49.92
	Liver function monthly	Año 2, 3, 4 y 5	\$ 363.60
	Thyroid function quaterly	Año 2, 3, 4 y 5	\$ 70.08
	General urine test monthly	Año 2, 3, 4 y 5	\$ 38.76
	Neurologist consultation quaterly	Año 2, 3, 4 y 5	\$ 82.32
	Dermatologist consultation annual (not mandatory)	Año 2, 3, 4 y 5	\$ 20.58
	MNR twice a year (not mandatory)	Año 2, 3, 4 y 5	\$ 197.48
<b>Fingolimod</b>	Blood count quaterly	First year	\$ 16.64
	Differential diagnosis for Varicella Zoster	First year	\$ 17.64
	Pregnancy test	First year	\$ 7.95
	Neurologist consultation quaterly	First year	\$ 82.32
	Other specialists consultation (oftalmology, cardiology, psicology)	First year	\$ 61.74
	Liver function quaterly	First year	\$ 121.20
	Electrocardiogram	First year	\$ 16.75
	MNR biannual	First year	\$ 394.96
	Blood count quaterly	Año 2, 3, 4 y 5	\$ 15.64
	Neurologist consultation quaterly	Año 2, 3, 4 y 5	\$ 82.32
	Other specialists consultation (oftalmology, cardiology, psicology)	Año 2, 3, 4 y 5	\$ 61.74
	Liver function quaterly	Año 2, 3, 4 y 5	\$ 121.20
	MNR twice a year (not mandatory)	Año 2, 3, 4 y 5	\$ 197.48
<b>Interferón Beta 1a s.c.</b>	Blood count quaterly	Every year	\$ 16.64
	Neurologist consultation quaterly	Every year	\$ 82.32
	Psicology consultation	Every year	\$ 20.58
	Liver function quaterly	Every year	\$ 121.20
	TSH annual	Every year	\$ 38.00
	MNR annual	Every year	\$ 197.48
<b>Interferón Beta 1a i.m.</b>	Blood count quaterly	Every year	\$ 16.64
	Neurologist consultation quaterly	Every year	\$ 82.32
	Psicology consultation	Every year	\$ 20.58
	Liver function quaterly	Every year	\$ 121.20
	TSH annual	Every year	\$ 38.00
	MNR annual	Every year	\$ 197.48
<b>Teriflunomida 14 mg V.O.</b>	Liver function every two months	Every year	\$ 121.20
	MNR annual	Every year	\$ 197.48
	Neurologist consultation quaterly	Every year	\$ 82.32
<b>Ocrelizumab</b>	Blood count twice a year	Every year	\$ 16.64
	IgG, IgA, and IgM titers (within 4 weeks of each planned infusion date).	Every year	\$ 10.23
	MNR annual	Every year	\$ 197.48
	Neurologist consultation quaterly	Every year	\$ 82.32
	breast cancer monitoring	Every year	\$ 20.58

Source: Tariff of benefits for the National Health System 2014 (MSP)

Drug ceiling price list 10/02/18 (National Council for Setting and Reviewing Prices of Medicines for human use and consumption)

**Table VII. Adverse events management. Unit costs (usd)**

Adverse Events	Resources	Unit	Cost
Reaction associated with the infusion	General emergency consultation	Per AE	\$ 24,26
	Fexofenadine 120mg 1 d x 1 week (antihistamine)	Per AE	\$ 8,47
	Ibuprofen 400mg 3d x 1 week (anti-inflammatory)	Per AE	\$ 8,40
Herpes infection	Acyclovir 400mg 1d x 5 days (antiviral)	Per AE	\$ 16,60
	General emergency consultation	Per AE	\$ 24,26
Urinary tract infection	Ciprofloxacin 500mg bid x 7 days (antibiotic)	Per AE	\$ 12,46
	General emergency consultation	Per AE	\$ 24,26
Related to Autoimmune Thyroiditis	Hypothyroidism		
	General emergency consultation	Per AE	\$ 24,26
	Blood count	Per AE	\$ 4,16
hypertthyroidism	Levothyroxine 1d	Annual	\$ 3,65
	General emergency consultation	Per AE	\$ 24,26
	Blood test	Per AE	\$ 4,16
Basedow disease	Propionolol 40 mg V. O. X. day	Annual	\$ 28,83
	General emergency consultation	Per AE	\$ 24,26
	Blood test	Per AE	\$ 4,16
Allergic reaction	Propionolol 40 mg V. O. X. day	Annual	\$ 28,83
	General emergency consultation	Per AE	\$ 24,26
	Prednisolone 5mg 3d x 1 week	Per AE	\$ 1,19
Arthralgia	Lornalidin 10mg 1d x 1 month	Per AE	\$ 4,20
	General emergency consultation	Per AE	\$ 24,26
Acetaminophen 500 mg qid pm (one month)	Per AE	\$ 6,00	
	General emergency consultation	Per AE	\$ 24,26
Bronchitis	General emergency consultation	Per AE	\$ 24,26
	Codine 10 mg vo tid x 7 days	Per AE	\$ 9,66
	Amoxicillin 500mg tid x 5 d	Per AE	\$ 3,45
Diarrhea	General emergency consultation	Per AE	\$ 24,26
	Oral rehydration salts x 7 days	Per AE	*
injection site reaction	General emergency consultation	Per AE	\$ 24,26
	Fexofenadine 120mg 1 d x 7 days (antihistamine)	Per AE	\$ 8,47
	Ibuprofen 400mg 3d x 7 days (anti-inflammatory)	Per AE	\$ 8,40
Anaphylactic reaction	General emergency consultation	Per AE	\$ 24,26
	Hydrocortisone 100 mg iv stat	Per AE	\$ 2,92
Headache	General emergency consultation	Per AE	\$ 24,26
	Acetaminophen 500 mg qid x 30 days PRN	Per AE	\$ 6,00
	Acetaminophen 1000 mg stat	Per AE	\$ 0,40
severe infection	General emergency consultation	Per AE	\$ 24,26
	Ciprofloxacin 500mg bid x 7 days (antibiotic)	Per AE	\$ 12,46
	Ceftaxone 1g bid x 7 days (antibiotic)	Per AE	\$ 114,24
Upper abdominal pain	General emergency consultation	Per AE	\$ 24,26
	Acetaminophen 500 mg qid x 30 days PRN	Per AE	\$ 6,00
Atrioventricular block	General emergency consultation	Per AE	\$ 24,26
	Cardiology Consultation	Per AE	\$ 24,26
	Hospitalization (24 hours)	Per AE	\$ 82,08
Macular edema	Ophthalmology consultation	Per AE	\$ 22,79
	General emergency consultation	Per AE	\$ 24,26
Myalgia	Neurologist consultation	Per AE	\$ 20,58
	Ibuprofen 400mg 3d x 7 days (anti-inflammatory)	Per AE	\$ 8,40
Flu-like symptoms	Neurologist consultation	Per AE	\$ 20,58
	Ibuprofen 400mg 3d x 7 days (anti-inflammatory)	Per AE	\$ 8,40
Nasopharyngitis	General emergency consultation	Per AE	\$ 24,26
	Benzathine Penicillin 2.400.000 units im stat	Per AE	\$ 2,05
Fatigue	Neurologist consultation	Per AE	\$ 20,58
	Modafinil 200 mg vo per day x 30 days	Per AE	*
Fever	Neurologist consultation	Per AE	\$ 20,58
	Acetaminophen 500 mg qid x 30 days PRN	Per AE	\$ 6,00
Flushing	Neurologist consultation	Per AE	\$ 20,58
	Hydrocortisone 100 mg iv stat	Per AE	\$ 2,92
Autoimmune thrombocytopenic purpura	General emergency consultation	Per AE	\$ 24,26
	Prednisone 20 mg tid x 30 days pm	Per AE	\$ 53,10

\* Product is not included in the tariff list and is manufactured by the payer.

\*\* Modafinil is a product not included in the tariff list and corresponds to an out-of-pocket expense.

Source: Tariff of benefits for the National Health System 2014 (MSP)

Drug ceiling price list 10/02/18 (National Council for Setting and Reviewing Prices of Medicines for human use and consumption)