GABAPENTIN

REININ™

100 mg, 300 mg CAPSULE and 600 mg TABLET

ANTICONVULSANT / ANTI-EPILEPTIC

FORMULATIONS
Each capsule contains:
Gabapentin .....100 or 300 mg

Each tablet contains:
Gabapentin ..... 600 mg

PRODUCT DESCRIPTIONS
Gabapentin (Reinin) 100 mg is a hard gelatin capsule with light blue opaque cap and powder blue opaque body.
Gabapentin (Reinin) 300 mg is a hard gelatin capsule with standard blue opaque cap and body.
Gabapentin (Reinin) 600 mg is a white to off-white elliptical, film-coated tablet, scored on one side, plain on the other side.

PHARMACOLOGY
Gabapentin is structurally related to the inhibitory neurotransmitter gamma-aminobutyric acid (GABA). It has sufficient lipid solubility to cross the blood-brain barrier.

Despite its structural relationship to GABA and demonstrable antiepileptic activity, gabapentin's precise mechanism of action remains unknown. It does not modify $GABA_A$ or $GABA_B$ radioligand binding, it is not converted metabolically into GABA or a GABA agonist, and it is not an inhibitor of GABA uptake or degradation. Gabapentin also has no affinity for binding sites on common neuroreceptors such as benzodiazepine, glutamate, N-methyl-D-aspartate (NMDA), quisqualate, kainite, strychnine-insensitive or strychnine-sensitive glycine, $alpha_1$, $alpha_2$, or beta adrenergic, adenosine A_1 or A_2, cholinergic muscarinic or nicotinic, dopamine D_1 or D_2, histamine H_1, serotonin S_1 or S_2, opiate mμ, delta or kappa, $cannabinoid_1$, voltage-sensitive calcium channel sites labeled with nitrendipine or diltiazem, or at voltage-sensitive sodium channel sites labeled with batrachotoxinin A_{20}-alpha-benzoate. Furthermore, gabapentin does not alter the cellular uptake of dopamine, noradrenaline or serotonin.

The mechanism of gabapentin's anticonvulsant action is unknown. Gabapentin exhibits antiseizure activity in mice and rats in both the maximal electroshock and pentylenentetrazole seizure models and other preclinical models (e.g., strains with genetic epilepsy, etc).

The mechanism of gabapentin's analgesic action is unknown. In animal models, gabapentin prevents allodynia (pain-related behavior in response to a normally innocuous stimulus) and hyperalgesia (exaggerated response to painful stimuli). It prevents pain-related responses in neuropathic pain models and decreases pain-related responses after peripheral inflammation in rats or mice.

PHARMACOKINETICS
Gabapentin is absorbed from the gastrointestinal tract by means of a saturable mechanism. Bioavailability is not dose-proportional, i.e., bioavailability decreases as dose increases. Mean peak plasma gabapentin concentrations (C_{max}) occur at approximately three hours after single oral doses of gabapentin regardless of dose size or formulation. Mean time to reach peak plasma concentration (t_{max}) values after multiple-dose administration are approximately one hour shorter than the values after a single dose administration. Food has only a slight effect on the rate and extent of gabapentin absorption (14% increase in AUC and C_{max}).

Less than 3% of gabapentin circulates bound to plasma protein. Gabapentin has a volume of distribution of 57.7 liters. In patients with epilepsy, gabapentin concentrations in cerebrospinal fluid (CSF) are approximately 20% of corresponding plasma concentrations. Gabapentin is distributed in breast milk.

There is no evidence of gabapentin metabolism in humans. The elimination half-life of gabapentin is independent of dose and averages five to seven hours.

Gabapentin is eliminated solely by renal excretion. It does not induce hepatic mixed function oxidase enzymes responsible for drug metabolism.

Special Population
Renal Insufficiency: In subjects with renal insufficiency (mean creatinine clearance ranging from 13-114 mL/min) who were given single 400 mg oral doses of gabapentin, the mean gabapentin half-life ranged from about 6.5 hours (creatinine clearance >60 mL/min) to 52 hours (creatinine clearance <30 mL/min) and gabapentin renal clearance from about 90 mL/min (>60 mL/min) to about 10 mL/min (<30 mL/min). Mean plasma clearance decreased from approximately 190 to 20 mL/min. Dosage adjustment in adult patients with compromised renal function is necessary.
Hemodialysis: In anuric adult subjects, the apparent elimination half-life of gabapentin on nondialysis days was about 132 hours; during dialysis the apparent half-life of gabapentin was reduced to 3.8 hours. Hemodialysis had a significant effect on gabapentin elimination in anuric subjects. Dosage adjustment in patients undergoing hemodialysis is necessary.
Age: Gabapentin's apparent oral clearance (CL/F) decreased as age increased from about 225 mL/min in subjects 30 years old to about 125 mL/min in subjects 70 years and older. Renal clearance (CL_r) and CL_r adjusted for body surface area also declined with age; however, the decline in the renal clearance of gabapentin with age can be attributed to the decline in renal function. Reduction of gabapentin dose may be required in patients who have age-related compromised renal function.

INDICATIONS
Epilepsy
- Monotherapy in the treatment of partial seizures with and without secondary generalization in adults and adolescents aged over 12 years;
- Adjunctive therapy in the treatment of partial seizures with and without secondary generalization in adults and children aged 3 to 12 years.

Neuropathic Pain
- Treatment of peripheral neuropathic pain such as painful diabetic neuropathy and postherpetic neuralgia in adults.

DOSAGE AND ADMINISTRATION
In patients with poor general health, i.e., low body weight, after organ transplantation, etc., the dose should be titrated more slowly, either by using smaller dosage strengths or longer intervals between dosage increases.

It is not necessary to monitor gabapentin plasma concentration to optimize gabapentin therapy.

If gabapentin is reduced, discontinued and/or an alternate anticonvulsant drug is added to the therapy, this should be done gradually over a minimum of one week.

Recommended Gabapentin Oral Dose

May be given with or without food.

EPILEPSY

Adults and Adolescents aged over 12 years:

Effective Dose Range:
900–3,600 mg/day given in three equally divided doses;

Initial Titration:
Therapy may be initiated by titrating the dose or by administering 300 mg three times a day (TID) on Day 1. Titration scheme for the initiation of therapy is shown in Table 1:

Table 1. Gabapentin Initial Titration Dosing Chart

Day 1	Day 2	Day 3
300 mg once a day	300 mg every 12 hours	300 mg every 8 hours

Thereafter, based on individual patient response and tolerability, the dose can be further increased in 300 mg/day increments every 2 to 3 days up to a maximum dose of 3,600 mg/day.

Slower titration of gabapentin dosage may be appropriate for individual patients.

The minimum time to reach a dose of 1,800 mg/day is one week, to reach 2,400 mg/day is a total of two weeks, and to reach 3,600 mg/day is a total of three weeks.

For the TID dosing, the maximum time interval between doses should not exceed 12 hours to prevent breakthrough convulsions.

Children aged 3 to 4 years:

Effective Dose Range:
40 mg/kg/day given in three equally divided doses;

Starting Dose Range:
10–15 mg/kg/day given in three equally divided doses;

Children aged 5 to 12 years:

Effective Dose Range:
25–35 mg/kg/day, given in three equally divided doses;

Starting Dose Range:
10–15 mg/kg/day given in three equally divided doses;

Dosages up to 50 mg/kg/day have been well-tolerated in a long-term clinical study.

The effective dose in children aged 3 to 12 years old is reached by upward titration over a period of approximately three days.

PERIPHERAL NEUROPATHIC PAIN IN ADULTS

Starting Dose: 900 mg/day given in three equally divided doses; therapy may be initiated by titrating the dose as shown in Table 1.

Thereafter, based on individual patient response and tolerability, the dose can be further increased in 300 mg/day increments every 2-3 days up to a **Maximum Dose** of 3,600 mg/day. Slower titration of gabapentin dosage may be appropriate for individual patients.

The minimum time to reach a dose of 1,800 mg/day is one week, to reach 2,400 mg/day is a total of two weeks, and to reach 3,600 mg/day is a total of three weeks.

In the treatment of peripheral neuropathic pain such as painful diabetic neuropathy and postherpetic neuralgia, efficacy and safety have not been studied for treatment periods longer than five months. If a period requires dosing longer than five months, the physician should assess the patient's clinical status and determine the need for additional therapy.

Or, as prescribed by a physician.

DOSAGE IN PATIENTS WITH RENAL IMPAIRMENT
Dosage adjustment is recommended in patients with impaired renal function and those undergoing hemodialysis.

Table 2. Dosage of Gabapentin in Adults Based on Renal Function

Creatinine Clearance (mL/min)	Total Daily Dose [a] (mg/day)
≥ 80	900 - 3,600
50 - 79	600 - 1,800
30 - 49	300 - 900
15 - 29	150[b] - 600
<15[c]	150[b] - 300

a. Total daily dose should be administered as three divided doses. Reduced dosages are for patients with renal impairment (creatinine clearance <79 mL/min).
b. To be administered as 300 mg every other day.
c. For patients with creatinine clearance <15 mL/min, the daily dose should be reduced in proportion to creatinine clearance (e.g., patients with creatinine clearance of 7.5 mL/min should receive one-half the daily dose that patients with a creatinine clearance of 15 mL/min receive).

DOSAGE IN PATIENTS UNDERGOING HEMODIALYSIS
For anuric patients undergoing hemodialysis who have never received gabapentin: A loading dose of 300-400 mg, then 200-300 mg of gabapentin following each 4 hours of hemodialysis, is recommended. On dialysis-free days, there should be no treatment with gabapentin.

For renally impaired patients undergoing hemodialysis: The maintenance dose of gabapentin should be based on the dosing recommendations shown in Table 2. In addition to the maintenance dose, an additional 200-300 mg dose following each 4-hour hemodialysis treatment is recommended.

Or, as prescribed by a physician.

CONTRAINDICATION
Hypersensitivity to gabapentin or to any component of the product.

WARNINGS AND PRECAUTIONS
Suicidal Behavior and Ideation
Antiepileptic drugs (AEDs), including gabapentin, increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with any AED for any indication should be monitored for the emergence of worsening of depression, suicidal thoughts or behavior, and/or any unusual changes in mood or behavior.

Pooled analysis of 199 placebo-controlled clinical trials (mono- and adjunctive therapy) of 11 different AEDS showed that patients randomized to one of the AEDs had approximately twice the risk (adjusted Relative Risk 1.8, 95% CI: 1.2, 2.7) of suicidal thinking or behavior compared to patients randomized to placebo. In these trials, which had a median treatment duration of 12 weeks, the estimated incidence rate of suicidal behavior or ideation among 27,863 AED-treated patients was 0.43%, compared to 0.24% among 16,029 placebo-treated patients, representing an increase of approximately one case of suicidal thinking or behavior for every 530 patients treated. There were four suicides in drug-treated patients in the trials and none in placebo-treated patients, but the number is too small to allow any conclusion about drug effect on suicide.

The increased risk of suicidal thoughts or behavior with AEDs was observed as early as one week after starting drug treatment with AEDs and persisted for the duration of treatment assessed. Because most trials included in the analysis did not extend beyond 24 weeks, the risk of suicidal thoughts or behavior beyond 24 weeks could not be assessed.

The risk of suicidal thoughts or behavior was generally consistent among drugs in the data analyzed. The finding of increased risk with AEDs of varying mechanisms of action and across the range of indications suggests that the risk applies to all AEDs used for any indication. The risk did not vary substantially by age in the clinical trials analyzed.

The relative risk for suicidal thoughts or behavior was higher in clinical trials for epilepsy than in clinical trials for psychiatric or other conditions, but the absolute risk differences were similar for the epilepsy and psychiatric indications.

Anyone considering prescribing gabapentin or any other AED must balance this risk with the risk of untreated illness. Epilepsy and many other illnesses for which AEDs are prescribed are themselves associated with morbidity and mortality and an increased risk of suicidal thoughts and behavior. Should suicidal thoughts and behavior emerge during treatment, the prescriber needs to consider whether the emergence of these symptoms in any given patient may be related to the illness being treated.

Patients, their caregivers and families should be informed that AEDs increase the risk of suicidal thoughts and behavior and should be advised of the need to be alert for the emergence or worsening of the signs and symptoms of depression, any unusual changes in mood or behavior, or the emergence of suicidal thoughts, behavior, or thoughts about self-harm. Behaviors of concern should be reported immediately to healthcare providers.

Neuropsychiatric Adverse Events (Pediatric patients 3 to 12 years old)
Gabapentin use in pediatric patients 3 to 12 years old with epilepsy is associated with mild to moderate central nervous system adverse events such as emotional lability (primarily behavioral problems), hostility (including aggressive behaviors), thought disorder (including concentration problems and change in school performance), and hyperkinesias (primarily restlessness and hyperactivity).

Withdrawal Precipitated Seizure, Status Epilepticus
Anticonvulsant drugs, including gabapentin, should not be discontinued suddenly because of the possibility of increased seizure frequency. Discontinuance of gabapentin and/or addition of an alternative anticonvulsant drug to current therapy should be done gradually over a minimum of one week.

Since adequate data are not available, it is impossible to say whether or not treatment with gabapentin is associated with a higher or lower rate of status epilepticus than would be expected to occur in a similar population not treated with gabapentin.

Use in ambulatory patients
Gabapentin may cause drowsiness, somnolence and other symptoms and signs of CNS depression. Patients should be cautioned that the drug may impair their ability to perform hazardous activities requiring mental alertness or physical coordination such as operating machinery or driving a motor vehicle.

Sudden and Unexplained Death in Patients with Epilepsy
During gabapentin's pre-marketing development, sudden and unexplained deaths were reported. Some of these could represent seizure-related deaths in which the seizure was not observed, such as at night. This represents an incidence of 0.0038 deaths per patient-year. Although this rate exceeds that expected in a healthy population matched for age and sex, it is within the range of estimates for the incidence of sudden unexplained deaths in patients with epilepsy not receiving gabapentin. Thus, whether these data are reassuring or raise further concern depends on comparability of the populations reported upon to the gabapentin cohort and the accuracy of the estimates provided.

DRUG INTERACTIONS
Antacids: Antacids may reduce the bioavailability of gabapentin by up to 20%. It is recommended that gabapentin be taken about two hours after antacid administration.

Cimetidine: Gabapentin's mean apparent oral clearance and creatinine clearance decreased by 14% and 10%, respectively, in the presence of cimetidine 300 mg. Thus, cimetidine appeared to alter the renal excretion of both gabapentin and creatinine which is an endogenous marker of renal function.

Hydrocodone: Concomitant use of gabapentin (125 - 500 mg) decreases hydrocodone C_{max} and AUC values in a dose-dependent manner relative to the use of hydrocodone alone; C_{max} and AUC values are 3% to 4% lower, respectively, after administration of gabapentin 125 mg and 21 - 22% lower, respectively, after administration of gabapentin 500 mg. Hydrocodone increases gabapentin AUC values by 14%.

Morphine: Concomitant use of morphine and gabapentin may result in increased plasma concentrations of gabapentin. Patients who experience symptoms of CNS depression such as somnolence may require a decrease in morphine or gabapentin dosage.

Naproxen: Concomitant use of naproxen sodium and gabapentin increases the amount of absorbed gabapentin by 12% to 15%.

Oral contraceptives: Multiple-dose pharmacokinetic profiles (based on AUC and half-life) of norethindrone and ethinyl estradiol after administration of norethindrone acetate 2.5 mg and ethinyl estradiol 50 mcg were similar with and without concomitant use of gabapentin 400 mg.

Probenecid: Gabapentin pharmacokinetic parameters with and without probenecid were comparable. This indicates that gabapentin does not undergo renal tubular secretion by the pathway that is blocked by probenecid.

Anticonvulsants: Pharmacokinetics of gabapentin were unchanged after administration of other anticonvulsants such as valproic acid, carbamazepine, phenobarbital, or phenytoin.

STATEMENT ON USAGE FOR HIGH RISK GROUPS

PREGNANCY AND LACTATION
Pregnancy Category C. Gabapentin has been shown to be fetotoxic in rodents. However, there are no adequate and well-controlled studies in pregnant women. Gabapentin should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Gabapentin is secreted into human milk after oral administration. A breastfed infant could be exposed to a maximum dose of approximately 1 mg/kg/day of the drug. Since the effect on breastfeeding infant is unknown, gabapentin should be used in breastfeeding women only if the benefits clearly outweigh the risks.

PEDIATRIC USE
There is no evidence of safety and efficacy of gabapentin in the management of postherpetic neuralgia in children. There is no evidence of efficacy of gabapentin as adjunctive therapy in the treatment of partial seizures in children below 3 years old.

GERIATRIC USE
The dose of gabapentin may need to be reduced in proportion to any reduction in creatinine clearance.

UNDESIRABLE EFFECTS / ADVERSE EFFECTS
Body as a Whole: Asthenia, infection, accidental injury, fatigue, viral infection, fever, malaise, face edema, allergy, generalized edema, chill, lassitude, alcohol intolerance, hangover effect, abscess, mucous membrane disorder, body odor, lump in neck

Nervous System: Headache, dizziness, somnolence, ataxia, abnormal thinking, abnormal gait, incoordination, amnesia, hypoesthesia, dysesthesia, hyperesthesia, nystagmus, tremor, nervousness, dysarthria, depression, twitching, abnormal coordination, hostility, emotional lability, hyperkinesia, strange feelings, vertigo, paresthesia, decreased or absent reflexes, increased reflexes, anxiety, CNS tumors, abnormal dreaming, aphasia, intracranial hemorrhage, hypotonia, paresis, dystonia, hemiplegia, facial paralysis, stupor, cerebellar dysfunction, positive Babinski sign, decreased position sense, subdural hematoma, apathy, hallucination, agitation, paranoia, depersonalization, euphoria, feeling high, doped-up sensation, suicide attempt, psychosis, choreathetosis, orofacial dyskinesia, encephalopathy, nerve palsy, personality disorder, subdued temperament, apraxia, fine motor control disorder, meningismus, local myoclonus, hypokinesia, mania, neurosis, hysteria, antisocial reaction, migraine, confusion, insomnia, neuropathy, speech disorder, circumoral paresthesia, hypertonia, movement disorder, vestibular disorder

Cardiovascular: Vasodilation, hypertension, hypotension, angina pectoris, peripheral vascular disorder, palpitation, tachycardia, bradycardia, murmur, atrial fibrillation, heart failure, thrombophlebitis, myocardial infarction, cerebrovascular accident, pulmonary thrombosis, ventricular extrasystoles, premature atrial contraction, pericardial rub, heart block, pulmonary embolus, pericardial effusion, pericarditis, syncope, chest pain, cardiovascular disorder, congestive heart failure, increased capillary fragility, phlebitis, varicose vein

Gastrointestinal: Abdominal pain, diarrhea, dry mouth, constipation, nausea, vomiting, flatulence, dyspepsia, dental abnormalities, gingivitis, glossitis, gum hemorrhage, thirst, stomatitis, increased salivation, gastroenteritis, hemorrhoids, bloody stools, fecal incontinence, hepatomegaly, dysphagia, eructation, pancreatitis, peptic ulcer, colitis, blisters in mouth, tooth discolor, perleche, enlarged salivary gland, lip hemorrhage, esophagitis, hiatal hernia, hematemesis, proctitis, irritable bowel syndrome, rectal hemorrhage, esophageal spasm, oral moniliasis, gastritis, tooth disorder, abnormal stools, periodontal abscess, cholecystitis, cholelithiasis, duodenal ulcer, gamma glutamyl transpeptidase increased, intestinal obstruction, intestinal ulcer, melena, mouth ulceration, rectal disorder

Metabolic and Nutritional: Peripheral edema, weight gain, weight loss, hyperglycemia, increased appetite, hyperlipidemia, hypercholesterolemia, anorexia, impotence, decreased libido, increased libido, ejaculation abnormal, hyperthyroid, hypothyroid, goiter, hypoestrogen, ovarian failure, epididymitis, swollen testicle, cushingoid appearance, diabetes mellitus, gout, hypoglycemia, alkaline phosphatase increased, diabetic ketoacidosis, lactic dehydrogenase increased

Hematologic: Leukopenia, decreased WBC count, increased WBC count, purpura, anemia, thrombocytopenia, lymphadenopathy, lymphocytosis, non-Hodgkin's lymphoma, increased bleeding time, sepsis, ecchymosis, lymphoma-like reaction, prothrombin decreased

Urogenital/Reproductive: Hematuria, dysuria, urination frequency, cystitis, abnormal blood urea nitrogen (BUN) value, urinary tract infection, urinary incontinence, vaginal moniliasis, breast pain, menstrual disorder, polyuria, urinary retention, cystitis, swollen penis, gynecomastia, nocturia, pyelonephritis, swollen scrotum, urinary urgency, urine abnormality

Hepatic: Liver function tests abnormal

Musculoskeletal: Back pain, myalgia, fracture, arthralgia, tendonitis, arthritis, joint stiffness, joint swelling, positive Romberg test, costochondritis, osteoporosis, bursitis, contracture, neck pain, pelvic pain, arthrosis, leg cramps, myasthenia, shin bone pain, joint disorder, tendon disorder

Respiratory: Pharyngitis, coughing, bronchitis, respiratory infection, pneumonia, epistaxis, dyspnea, apnea, mucositis, aspiration pneumonia, hyperventilation, hiccup, laryngitis, nasal obstruction, snoring, bronchospasm, hypoventilation, lung edema, rhinitis, sinusitis, asthma, lung disorder, hemoptysis, voice alteration

Skin and appendages: Rash, abrasion, pruritus, alopecia, eczema, dry skin, increased sweating, urticaria, hirsutism, seborrhea, cyst, herpes simplex, herpes zoster, skin discolor, skin papules, photosensitive reaction, leg ulcer, scalp seborrhea, psoriasis, desquamation, maceration, skin nodules, subcutaneous nodule, melanosis, skin necrosis, local swelling, cellulitis, skin ulcer, skin disorder, fungal dermatitis, furunculosis, vesiculobullous rash, acne, hair disorder, maculopapular rash, nail disorder, skin carcinoma, skin hypertrophy

Special Senses: Amblyopia, conjunctivitis, diplopia, eyes dry, eye pain, visual field defect, photophobia, bilateral or unilateral ptosis, eye hemorrhage, eye twitching, hordeolum, retinal vein thrombosis, conjunctival hyperemia, diabetic retinopathy, fundi with microhemorrhage, abnormal vision, eye itching, abnormal accommodation, eye focusing problem, watery eyes, retinopathy, glaucoma, iritis, corneal disorders, lacrimal dysfunction, degenerative eye changes, blindness, retinal degeneration, miosis, chorioretinitis, strabismus, otitis media, otitis externa, hearing loss, earache, tinnitus, inner ear infection, deafness, ear fullness, ear pain, perforated ear drum, sensitivity to noise, Eustachian tube dysfunction, labyrinthitis, tongue disorder, taste perversion, taste loss, unusual taste, odd smell

OVERDOSAGE AND MANAGEMENT
In animal models, signs of acute toxicity include ataxia, labored breathing, ptosis, sedation, hypoactivity, and excitation. However, gabapentin's lethal dose was not identified in mice and rats after receiving single oral doses of 8,000 mg/kg.

Acute, life-threatening toxicity has not been seen in humans with gabapentin overdoses of up to 49 g. In these cases, double vision, slurred speech, drowsiness, lethargy, and diarrhea were observed. All patients recovered with supportive care.

Patients should be monitored closely and given supportive care following gabapentin overdoses. It is not known whether the use of activated charcoal is effective in delaying the absorption of gabapentin. Gabapentin can be removed by hemodialysis but this is not usually required. However, in patients with renal impairment, hemodialysis may be performed.

ADVERSE DRUG REACTION REPORTING STATEMENT
For suspected adverse drug reaction, seek medical attention immediately and report to the FDA at www.fda.gov.ph **AND** Unilab at (+632) 858-1000 or productsafety@unilab.com.ph. By reporting undesirable effects, you can help provide more information on the safety of this medicine.

AVAILABILITY
Gabapentin (Reinin™) 100 mg Capsule - Box of 100 capsules (in flex foil x 10's) - DR-XY33141
Gabapentin (Reinin™) 300 mg Capsule - Box of 100 capsules (in flex foil x 4's) - DR-XY32652
Gabapentin (Reinin™) 600 mg Tablet - Box of 30 tablets (in Alu-Alu Blister Foil x 6's) - DR-XY38026 *

STORAGE CONDITION
Store at temperatures not exceeding 30°C.
Keep the product out of reach and sight of children.

CAUTION: Foods, Drugs, Devices, and Cosmetics Act prohibits dispensing without prescription.

Manufactured by
AMHERST LABORATORIES, INC.
UNILAB Pharma Campus
Barangay Mamplasan, Biñan
Laguna, Philippines
for UNILAB, Inc.
No. 66 United Street, Mandaluyong City
Metro Manila, Philippines

P300000017597 Date of First Authorization: March 29, 2007 June 21, 2010 * Date of Revision: November 2013

Trusted Quality Healthcare