THE EFFECTIVENESS OF TOPICAL GARLIC EXTRACT FOR METHICILLIN RESISTANT
Staphylococcus aureus TREATMENT IN BURNS
(1 Desospupito, R Primadina)

Mycobacterium tuberculosis IMMUNOGLOBULIN M (IgM) AND IMMUNOGLOBULIN
G (IgG) SURVEY IN HIV-INFECTED DONORS
(Ocky Dwi Suprobowati)

COMPARING THE EFFECT OF RED YEAST RICE, DATE PALM, AND GUAVA LEAF EXTRACT ON
THROMBOCYTE AND MEGAKARYOCYTE COUNT IN THROMBOCYTOPENIC WHITE RATS
(Sundari Indah Wiyastuti, Kristanti Wartono Wiyati, Tjipta Wardani)

MATERNALLY INHERITED NUCLEOTIDE VARIATION OF MITOCHONDRIAL DNA (mtDNA) D-LOOP
REGION 126 pb (nt: 34-159 HVS II) IN MADURESE INDIVIDUALS
(Ahad Yudiarto, Indah Nuraini M)

RAPID CULTURE METHOD USING BIPHASIC MEDIA ON BACTERIOLOGIC DIAGNOSIS TO DETECT
Mycobacterium tuberculosis FOR DETERMINING PULMONARY TUBERCULOSIS
(Ni Made Mertaniasih, Lindawati Almsardjono, JF Pattingan, Soedarsono)

EFFECT OF CARBIDE AND CaCl2 CONCENTRATION ON VITAMIN C CONTENTS
OF BANANA KEPOK
(Indah Lestari)

DIRECT CLONING OF MELANOMA ANTIGEN 1 (MAGE-1) AND THE E2 GENE OF HOG CHOLERA VIRUS
(HCV) FROM THE BLUNT END PCR PRODUCT USING pET 101/D-TOPO
(Gordo Mastuti, Rosmelati Situmeang)

QUANTITATION OF MICROORGANISMS IN LOWER RESPIRATORY TRACT SECRETIONS
(Masuki R Wahyuntini, Kuntanan, Ni Made Mertaniasih)

BMI-QUAT ASSESSMENT RESULT APPROPRIATES TO DIAGNOSE OSTEOPOROSIS
(Priyambada C Nugraha, Rachmat G Wachjadi, Tati R Menjoko)

ACID-FAST BACTERIA M. Irae EXAMINATION IN LEPROSY PATIENTS
BEFORE AND AFTER TREATMENT
(Sullati)

DIAGNOSTIC ROLE OF INTRA OPERATIVE OVARIAN CYST FLUID CYTOLOGY
IN DETERMINING MALIGNANCY
(Elty Hary Kusumastuti, Alphantis Rahmat)

CORRELATION BETWEEN ADOLESCENTS' KNOWLEDGE ON DRUG HAZARD
AND THEIR BEHAVIOR IN DRUG ABUSE IN TULUNGAGUNG
(Indaszah)

BASAL INSULIN AS ADD-ON THERAPY TO ORAL GLUCOSE-Lowering DRUGS IN
INSULIN NAIVE PATIENTS WITH TYPE 2 DIABETES MELLITUS IN PRIMARY PUBLIC HEALTH CENTER
(Hermina Novinda, Agung Pranoto, Jonghy Hendro Prayitno, Askandar Tjokrosuwirjo)
# Table of Contents

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RELATIONSHIP BETWEEN N-TERMINAL PRO-BRAIN NATRIURETIC PEPTIDE (NT-proBNP) LEVEL AND PROTEIN ST2 LEVEL IN ACUTE CORONARY SYNDROME PATIENT</td>
<td>202 - 207</td>
</tr>
<tr>
<td>2</td>
<td>THE EFFECT OF LIME PEEL EXTRACT (Citrus Aurantifolia) TO TOTAL BLOOD CHOLESTEROL LEVELS OF MICE (Mus musculus) THAT GIVEN THE HIGH CHOLESTEROL DIET</td>
<td>208 - 215</td>
</tr>
<tr>
<td>3</td>
<td>MONITORING OF POTASSIUM LEVEL ON THE HEART FAILURE PATIENTS USING CAPTOPRIL AND FUROSEMIDE</td>
<td>216 - 219</td>
</tr>
<tr>
<td>4</td>
<td>EFFECT OF RED YEAST RICE (Monascus Purpureus) EXTRACT TO THE TROMBOPOIETIN LEVEL IN DENGUE INFECTED PATIENTS</td>
<td>220 - 225</td>
</tr>
<tr>
<td>5</td>
<td>Amaranthus tricolor Linn PRESERVES THE THICKNESS OF SEMINIFEROUS TUBULES IN MICE (Mus musculus) INDUCED BY LEAD ACETATE</td>
<td>226 - 228</td>
</tr>
<tr>
<td>6</td>
<td>EFFECT OF LOW MOLECULAR WEIGHT TOPICAL HYALURONATE ON WHITE RAT SUPERFICIAL WOUNDS EPITHELIZATION TREATED WITH FREEZE-DRIED AMNION MEMBRANE</td>
<td>229 - 236</td>
</tr>
<tr>
<td>7</td>
<td>PROFILE OF CHEST AND ABDOMEN ULTRASOUND ON PATIENTS WITH DENGUE VIRUS INFECTION IN DR. SOETOMO HOSPITAL SURABAYA BETWEEN FEBRUARY-APRIL 2012</td>
<td>237 - 243</td>
</tr>
<tr>
<td>8</td>
<td>THE PREVALENCE OF EXTENDED SPECTRUM BETA-LACTAMASE (ESBL) IN THIRD GENERATION CEPHALOSPORIN USAGE AMONG SEPSIS PATIENTS IN THE DEPARTMENT OF INTERNAL MEDICINE RSUD DR. SOETOMO SURABAYA</td>
<td>244 - 251</td>
</tr>
<tr>
<td>9</td>
<td>Case Report: MANAGEMENT OF PEPTIC ULCER INFECTION DUE TO Helicobacter pylori INFECTION AND ABSCESS LIVER BOWEL PERFORATION</td>
<td>252 - 258</td>
</tr>
<tr>
<td>10</td>
<td>DIFFERENCE OF PAIN INTENSITY IN TENSION TYPE HEADACHE PATIENTS FOCUSING ON THE PERSONALITY</td>
<td>259 - 262</td>
</tr>
<tr>
<td>11</td>
<td>HEARING DISORDER IN MULTIDRUG-RESISTANT TUBERCULOSIS PATIENTS AT THE OUTPATIENTS UNIT, PULMONARY DEPARTMENT, DR. SOETOMO HOSPITAL SURABAYA</td>
<td>263 - 267</td>
</tr>
<tr>
<td>12</td>
<td>THE DIFFERENCE OF HEART RATE RECOVERY AMONG OBESE SUBJECTS WITH AND WITHOUT METABOLIC SYNDROME</td>
<td>268 - 271</td>
</tr>
<tr>
<td>13</td>
<td>DYSFUNCTION OF COCHLEAR AND RETROCOCHLEAR WITH TINNITUS IN NORMAL HEARING</td>
<td>272 - 276</td>
</tr>
</tbody>
</table>
Abstract

Protein ST2 has a pluripotent role and participates in immunology process, as well as in fibrotic of heart as response to injury. The ST2 gene encodes two isoforms of ST2 protein, trans-membrane (ST2L) and soluble, circulating (sST2) induced in cardiomyocytes and fibroblasts by biomechanical stress. sST2 is considered a novel biomarker for cardiac strain. N-Terminal Pro-Brain Natriuretic Peptide (NT-proBNP) is released as a response of wall stress and myocyte stretch. Plasma concentration of NT-proBNP rises rapidly over the first 24h after acute myocardial infarct then declines, and exhibit a second rise after five days, possibly related to adverse remodeling. When measured either at the time of initial presentation onset of ACS, the blood concentration of NT-proBNP is strongly and independently associated with the short- and long-term risk of death and heart failure. Our objective is to analyze correlation between serum level of Protein ST2 and NT-proBNP on Acute Coronary Syndrome (ACS) patient. This is an observational study of 34 Acute Coronary Syndrome Patient in Emergency Room and ICCU dr Soetomo Hospital. Quantikine® human ST2/IL-1 R4 Immunoassay was used to measured protein ST2 concentrations with ELISA method and RELIA TM Immunoassay Diagnostic Instrument (SSJ-2) Kit was used to measured NT-proBNP concentrations with ELISA method, 1 hour after admission. The proportion of NT-proBNP between normal category and second class is almost the same, namely 32,4% and 35,3%. The lowest proportion is owned by fourth class, which is 8,8%. There was correlation between peak ST2 and Amount of NT-proBNP elevation. (FMI2013;49:202-207)

Keyword : Acute, Coronary, Syndrome, ST2, NT-proBNP,

Daftar Pustaka :