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# Analysis of Dengue Hemorrhagic Fever in Adult Patients in Panti Rahayu Yakkum Purwodadi Hospital

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The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

**ABSTRACT**

**Purpose:** This study aimed to analyze the treatment of dengue hemorrhagic fever in adult inpatients at Panti Rahayu Yakkum Purwodadi Hospital and to evaluate the appropriateness of therapy based on the 2020 Indonesian Ministry of Health guideline.

**Research Method:** This research used a non-experimental observational design with a retrospective descriptive-analytic approach. Data were collected from the medical records of 95 adult inpatients diagnosed with dengue hemorrhagic fever during January-September 2025 using purposive sampling. The variables included patient characteristics, supportive therapy, concomitant drugs, and therapeutic appropriateness. Data were analyzed descriptively and evaluatively.

**Results and Discussion:** The most frequently used therapies were Ringer Lactate infusion (96.84%), paracetamol 500 mg (50.53%), and intravenous paracetamol (45.26%). Evaluation showed appropriate indication in 70.5% of cases, appropriate drug in 51.6%, appropriate patient in 93.7%, and appropriate dose in 95.8%. The findings indicate that dengue treatment was largely dominated by supportive therapy, although some inappropriate drug use was still identified.

**Implications:** The findings underscore the importance of adherence to clinical guidelines for improving therapeutic safety and effectiveness. Further studies are recommended to examine the relationship between therapeutic appropriateness, clinical outcomes, complications, and length of hospitalization.

**Keywords:** dengue hemorrhagic fever; adult inpatients; supportive therapy; therapeutic appropriateness; hospital treatment; clinical guideline.

## 1. Introduction

Dengue hemorrhagic fever (DHF) is a type of disease caused by dengue virus infection, where the spread of the virus takes place from human intermediaries through the bite of a mosquito of the Aedes Aegepty type. Dengue fever mosquito transmission is widely found or often occurs in parts of Indonesia (Agustin et al., 2023). This virus can increase due to environmental factors and climate change that support the emergence of the Aedes Aegepty mosquito as the main vector. The transmission channel in this virus is through mosquito bites that have sucked the blood of people who have been infected with DENV, then the virus spreads in the mosquito's middle intestine before spreading to other tissues (WHO, 2025).

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Treatment of dengue in adult patients requires more intensive monitoring than pediatric patients, as adult patients are at risk of more serious complications. In the main treatment of dengue hemorrhagic fever (DHF), it is necessary to provide fluids to prevent dehydration and closely monitor the patient's condition, and symptomatic therapies such as antipyretics as a fever reducer, and caution must be exercised in the administration of drugs that can worsen bleeding, namely antiplatelet or anticoagulant drugs, must be avoided due to the risk of bleeding that occurs in the critical phase of dengue. Analyzing the treatment of dengue in adult patients is very important to determine the suitability of the characteristics of adult patients, in order to avoid complications and speed up recovery (Azzahra and Narsa, 2023).

The data on dengue cases in Indonesia is still quite high, in 2023 there were reported 114,720 dengue cases with a high mortality rate of 894 cases, in addition to that in 2024 dengue cases will increase to 119,709 cases (Ministry of Health, RI 2023). Central Java Province is recorded as one of the regions with a high number of dengue cases and death rates, especially when entering the rainy season (Central Java Health Office, 2022). Although guidelines for the management of adult dengue fever are available, the application of therapy in health facilities still varies. Therefore, the evaluation of dengue therapy in dengue patients still needs to be carried out to assess the suitability of drug use and the effectiveness of therapy. This study aims to analyze the therapy of Dengue Hemorrhagic Fever in adult patients hospitalized at Panti Rahayu Yakkum Purwodadi.

## 2. Literature Review and Hypothesis Development

### *2.1 Epidemiology of Dengue*

Dengue hemorrhagic fever (DHF) is a viral disease transmitted through the bite of Aedes aegypti and Aedes albopictus mosquitoes.This disease is still one of the important health problems in tropical and subtropical countries with climate change bringing higher temperatures, rainfall, and humidity, and weakened immune systems (Sutriyawan & Suherdin, 2022). The World Health Organization (WHO) 2024 states that the dengue virus has experienced a high increase in the last two decades, now more than 100 countries with millions of cases reported every year. Cases surging in the world are influenced by urbanization, climate change and the expansion of dengue vector habitats. Dengue disease in Indonesia is still an increasing disease every year. Based on data from the Ministry of the Republic of Indonesia, in 2023 there will be tens of thousands of dengue cases with mortality rates that are still a concern in several provinces. Regional conditions, high rainfall, and population density can be factors that accelerate the spread of the vector and increase the risk of dengue virus transmission (Ministry of Health of the Republic of Indonesia, 2023).

Central Java Province is one of the regions with fairly high dengue cases. Central Java Health Profile data in 2022 shows that this province has a Case Fatality Rate (CFR) of around 2.08%, including one of the highest categories in Indonesia. The increase in cases occurs during the rainy season period, when the mosquito population increases (Central Java Health Office, 2022).

### *2.2 Management of Inpatient Adult Dengue Treatment*

Dengue infection is a disease that has a broad clinical spectrum including severe and non-severe clinical manifestations. After experiencing the incubation period, the manifestation of the disease will undergo sudden changes followed by three phases, namely the febris phase, the critical phase and the recovery

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phase. In the treatment of dengue, there is no specific therapy for the treatment of DD and dengue, the most important thing in the healing process is supportive therapy. In handling dengue cases, the main important action is to maintain fluid volume in the body. The patient must remain awake for oral fluid intake. This means that if the patient's intake is low, the need for action to help the fluids in the patient's body be fulfilled through intravenously to prevent dehydration and hemoconcentration in the patient (Ministry of Health of the Republic of Indonesia, 2020). Complications that often appear in adult dengue patients

### *2.3 Effectiveness of Dengue Treatment in Adult Patients*

#### *2.3.1 Exact Indications*

Treatment of dengue hemorrhagic fever (DHF) is said to be appropriate if treatment is given in accordance with the patient's clinical condition, for example intravenous fluids are given when there is a condition of hemoconcentration, dehydration, or shock (Ministry of Health of the Republic of Indonesia, 2020).

#### *2.3.2 Right Medication*

Treatment is said to be appropriate for the drug shown by selecting therapy that is in accordance with the guidelines, namely crystalloid treatment as the main therapy for dengue hemorrhagic fever patients and the administration of paracetamol as an antipyretic (fever reducer) and avoiding drugs with the NSAID group that can be at risk of increasing bleeding (Ministry of Health of the Republic of Indonesia, 2020).

#### *2.3.3 Right Patient*

It is said that it is appropriate for the patient to treat dengue which means that the management is adjusted to the state of the patient's clinical condition, according to the disease, such as the difference in therapy in shock patients who need more intensive monitoring (Ministry of Health of the Republic of Indonesia, 2020).

#### *2.3.4 Proper Dosage*

The right dose in the treatment of dengue is indicated by the administration of therapy based on the patient's needs, for example fluid calculation based on BB and evaluation of clinical response so that it is not excessive and lacking.

#### *2.3.5 Treatment Outcomes*

The results of dengue treatment are considered good if therapy is carried out on time and in accordance with the improvement of the patient's condition, prevention of complications, and a mortality rate that remains low or the mortality rate can be reduced to less than 1% (Ministry of Health of the Republic of Indonesia, 2020).

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## 3. Research Method

This study uses a non-experimental observational design with a retrospective analytical descriptive approach. Data were obtained from the medical records of 95 adult dengue patients who were hospitalized in the period January – September 2025, using purposive sampling techniques. Data analysis is univariate and evaluative descriptive. The variables analyzed included patient characteristics and dengue therapy administered during hospitalization. Evaluation of the suitability of the effectiveness of dengue therapy in adult patients based on the 2020 DHF management guidelines of the Ministry of Health of the Republic of Indonesia which includes the right indications, the right patient, the right medication and the right dose.

## 4. Results and Discussion

### *4.1 Analysis Results*

**Table 1. Characteristics of Adult Dengue Patients**

| Patient Characteristics | | Quantity (N) | Percentage (%) |
|---|---|---|---|
| **Age (Years)** | 18 – 20 | 24 | 25,3 |
| | 21 – 40 | 55 | 57,9 |
| | 41 – 60 | 13 | 13,7 |
| | 61 - 70 | 3 | 3,2 |
| **Gender** | Men – men | 48 | 50,5 |
| | Women | 47 | 49,5 |
| **Length of Stay (Days)** | 1 - 3 | 37 | 38,9 |
| | 4 – 7 | 57 | 60,0 |
| | >7 | 1 | 1,1 |
| **Degree of Severity** | Lightweight | 3 | 3,2 |
| | Medium | 86 | 90,5 |
| | Weight | 6 | 6,3 |
| **Platelet Category** | Normal | 5 | 8,1 |
| | Mild thrombocytopenia | 15 | 24,2 |
| | Moderate thrombocytopenia | 36 | 58,1 |
| | Severe thrombocytopenia | 6 | 9,7 |

**Table 2. Profile of Supportive Therapy for Dengue**

| Drug Name | Dosage | Rules of Use | Delivery Route | N (Total) | Percentage (%) |
|---|---|---|---|---|---|
| Paracetamol Infusion | Extras | Extras | Intravenously | 43 | 45, 26 |
| Pacquiao® (Paracetamol 500mg) | 500mg | 4 x 1 tab | Oral | 48 | 50, 53 |
| Pacquiao® (Paracetamol 600mg) | 600mg | 3 x 1 tab | Oral | 19 | 20, 00 |
| NaCL | 500ml | 500cc/8h | Intravenously | 2 | 3, 16 |
| RL® (Otsu) | 500ml | 500cc/8h | Intravenously | 92 | 96, 84 |

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**Table 3. Suitability of Therapy**

| Suitability of Therapy | | Amount(N) | Percentage (%) |
|---|---|---|---|
| Precise indication | Precise | 67 | 70,5 |
| | Inappropriate | 28 | 29,5 |
| Exact patient | Precise | 89 | 93,7 |
| | Inappropriate | 6 | 6,3 |
| Exact medication | Precise | 49 | 51,6 |
| | Inappropriate | 46 | 48,4 |
| Precise dosage | Precise | 92 | 95,8 |
| | Inappropriate | 3 | 3,2 |

### *4.2 Discussion*

This section is also a significant part of the research articles and is usually the longest. Please present the discussion narratively (why element); in the debate, there is a linkage between the result, the basic concept, and the hypotheses. The fact needs to be precise. Discussion should not focus on significance or resemblance. Use these questions as guidelines in formulating synthesis/discussion: Do the results support the claims in this section? Do they seem reasonable? 2) Have the authors indicated how the results relate to expectations and earlier research? 3)Does the article support or contradict previous theories?

Has to be well described and should contain: (what/how element). The data has been processed (not raw), displayed in a table or figure (choose one), accompanied by a brief, understandable description, and the finding is stated. (Why element) In discussion, there is a connection between the result and the underlying concept or hypothesis. In some fields, there is even a need for a detailed review of every aspect of the work. The fact needs to be clear. (What other element?) Does it correspond to or contradict other research?

Based on the results of the research that has been carried out, in table 1, the characteristics of the patient include age, gender, length of hospitalization, severity, and platelet category. The adult age category based on table 4.1 in Dengue Hemorrhagic Fever (DHF) patients in Inpatient Nursing Home Rahayu Yakkum Purwodadi Hospital for the period January – September 2025 is the most common category in patients aged 21 – 40 years (57.9%), patients in the age range of 18 – 20 years (25.3%), patients with vulnerable ages 41 – 60 years as many as 13 (13.7%), and for patients with vulnerable 61 – 70 years as many as 3 (3.2%). The results of this study are in line with the research conducted (Suganthi et al., 2023) which stated that the most adult patients were found in the age category of 21-40 years (38.2%). The high incidence of dengue in the age category of 21-40 years can be attributed to the number of activities or treatments carried out at the age of 21-40 years, especially activities outside the home, so that there is a risk of exposure to the Aedes aegypti mosquito as the main vector of dengue transmission. In the adult age category, they are more productive, so they are most susceptible to dengue infection.

Based on the characteristics of patients in the gender category, this study was more than 48 (50.5%) male, compared to 47 (49.5%) females. These results are in accordance with research conducted (Kusumawardani, 2023) which states that more patients with dengue are found to be male than female. This condition is thought to be related to the difference in immune response between men and women,

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OPEN ACCESS
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where women have higher cytokine production than men, so the immune response formed is stronger. This difference can cause men to be more susceptible to dengue virus compared to women.

Based on the characteristics of patients with the category of length of hospitalization, most of them were in the range of 4 – 7 days as many as 57 (60.0%), in the range of 1 – 3 days as many as 37 (38.9%), and for the range of >7 days as much as 1 (1.1%). The results of this study are in line with (Faridah et al., 2022) which shows that the average length of hospitalization for the DHF group is around (4-5 days) compared to DF (<4 days). Pathohologically, dengue infection has 3 main phases, namely the fever phase (days 1 to 3), the critical phase (days 3 to 5), and the recovery phase (days 5-7). In general, patients affected by dengue begin treatment when entering the fever phase or the critical early phase, and when there is a decrease in platelets and the risk of complications increases. Therefore, patients need strict treatment and observation during the critical phase until entering the recovery phase, clinically requiring treatment time of about 4-7 days (Ministry of Health of the Republic of Indonesia, 2020).

Based on the characteristics of the dengue severity category, it is shown that the moderate severity (degree II) is the highest category, which is as many as 86 patients (90.5%), compared to the mild severity (I), and severe (III). In the medium severity with a number of 3 (3.2%), while for the severity with a weight category with a number of 6 (6.3%). The results of the study are also in accordance with the research (Jimat et al., 2022) carried out at PKU Muhammadiyah Delanggu Hospital, which states that most dengue patients who carry out treatment at the hospital are of moderate severity (degree III).

Patient characteristics showed that the platelet category in hospitalized dengue patients was the most numerous, namely 36 patients (37.9%), in the normal category there were 5 (5.3%), in the mild thrombocytopenia category there were 15 (15.8%), while the severe thrombocytopenia category amounted to 6 (6.3%). The results of this study are in line with the study (Guo et al., 2025) which states that thrombocytopenia) is the category of platelets that are most commonly found in patients affected by the dengue virus, usually around 50% of the total of all dengue patients during the critical phase.

Based on table 2. The supportive therapy profile was obtained in 43 patients (45.26%) with intravenous paracetamol, with 500mg (paracetamol tab) with 48 patients (50.26%), and intravenous fluid, namely RL (Ringer Lactate) in 92 patients (98.84%). This treatment profile focuses more on rehydration and antipyretic treatment that is appropriate to the clinical condition of adult dengue patients. This is in line with a study (Madanayake et al., 2021) which stated that adult dengue patients with dengue haemorrhagic fever mostly received crystalloid intravenous fluid as the main supportive therapy as many as 98 patients (85.2%) to maintain fluid in the body during the critical phase.

Based on table A1 (Appendix), showed comorbid drugs in adult dengue patients who underwent hospital treatment. The use of comorbid drugs is usually given as comorbidities that patients have other than dengue, such as congenital heart disease, hypertension and cirrhosis of the liver (Ministry of Health of the Republic of Indonesia, 2020). Some of the most commonly administered comorbid drugs were ondancentron injection for 33 patients (34.74%) and ranitidine inj for 71 patients (74.74%). This research is in line with (Sanjaya et al., 2025) which states that the administration of antiemetic drugs is most widely used by adult dengue patients, namely ondansentron.

Dengue patients usually tend to experience severe nausea and vomiting so that it can affect the nutritional condition and pragnosis of the disease. In this study, the most widely used antiulcer drug in adult dengue patients was ranitidine inj (Sanjaya et al., 2025). According to (Khan et al., 2021) in a study (Sanjaya et al., 2025) Adult dengue patients tend to experience nausea and vomiting, which can result in an excessive increase in stomach acid.

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Based on table 3. Suitability of dengue therapy showed the accuracy of the indications in adult patients by 67 patients (70.5%) which means that the therapy provided was in accordance with the patient's diagnosis, while inaccurate as many as 28 (29.5%). This shows that the high level of conformity with the 2020 Adult Dengue Management Guidelines of the Ministry of Health of the Republic of Indonesia, namely the provision of supportive therapy or the main therapy of dengue such as intravenous fluids and antipyretics which are only given to patients when they experience a phase that requires treatment. The results of this study are higher than the study (Meriska et al., 2019) which stated that the accuracy of the indications was 28 patients (93.33%). This difference may be due to the characteristics of the patient, and the setting of the study.

The suitability of dengue therapy on the accuracy of medication for adult dengue patients was 49 patients (51.6%) and inappropriate 46 (48.4%). The drugs given to adult dengue patients at Panti Rahayu Yakkum Purwodadi Hospital are generally drugs in accordance with the 2020 Indonesian Ministry of Health management guidelines, namely safe antipyretics and the provision of liquid therapy. However, there are still therapies that are not in accordance with the guidelines for adult dengue management, namely the administration of NSAIDs (Nonsteroidal Anti-inflammatory Drugs) such as ketorolac inj as many as 5 (5.26%), Mexigesic with paracetamol and ibuprofen content as many as 11 (11.33%) which are classes of drugs that can cause severe bleeding, so it is not recommended for the therapy of dengue patients (Ministry of Health of the Republic of Indonesia, 2020). The results of this study are higher than the study (Meriska et al., 2019) which reported that the accuracy of the drug was 24 patients (80%). This difference may be due to the fact that the administration of drugs is not in accordance with the management guidelines of the Ministry of Health of the Republic of Indonesia.

The suitability of patient precision therapy in the administration of adult dengue therapy was 89 patients (93.7%) who were not appropriate patients as many as 6 (6.3%). The accuracy of administering drugs to patients at Yakkum Purwodadi Nursing Home Hospital is adjusted to the patient's clinical condition, such as differences in therapy in shock patients who need more intensive monitoring (Ministry of Health of the Republic of Indonesia, 2020). The results of this study are higher than the study (Meriska et al., 2019) which stated that there were 30 patients (100%) who showed the right patient. This is because there are no cases where the use causes contraindications in patients. This difference may be due to differences in patient characteristics and research settings.

The suitability of therapy at the accuracy of the dose as many as 92 patients (95.8%) showed the accuracy of the inappropriate dose as many as 3 (3.2%). Dengue therapy is said to be the right dose by being shown based on the patient's needs, such as fluid calculation, based on BB and evaluation of clinical responses so that they are not excessive and not deficient (Ministry of Health of the Republic of Indonesia, 2020). This is in line with the study (Hartini et al., 2024) stating that as many as 73 patients (98.65%) showed dose accuracy. The accuracy of the dosage in question is that the quantity of drugs given to dengue patients must be adjusted to the dosage range that is in accordance with the guidelines and what the patient needs.

Giving doses to patients exceeding the maximum value can result in the risk of side effects in the patient and if the dose is given low or less than the maximum value, it will reduce the achievement of the therapy carried out (Hartini et al., 2024).

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Volume 4, Issue 2 (2026). 89-99
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## 5. Concluding Remarks and Recommendation

The effectiveness of therapy in adult dengue hemorrhagic fever (DHF) patients at Panti Rahayu Yakkum Purwodadi Hospital showed quite good results. Based on the results of the evaluation, as many as 70 patients (73.7%) have received therapy that is *right indicated, that is, therapy given in accordance with the diagnosis and clinical needs of the patient. In addition, in the aspect of **exact medicine, as many as 70 patients (73.7%) received drugs in accordance with adult dengue management guidelines according to the Ministry of Health of the Republic of Indonesia in 2020. The assessment of **patient accuracy* also showed the same results, where 70 patients (73.7%) were categorized as patient-specific because the therapy provided had been adjusted to the condition and characteristics of each patient. Meanwhile, in terms of *dose accuracy*, as many as 70 patients (73.7%) have received drug doses in accordance with adult dengue management guidelines according to the Ministry of Health of the Republic of Indonesia in 2020.

For further research, it is hoped that the next researcher can assess the relationship between the suitability of therapy and the patient's clinical outcomes, as well as the length of hospitalization and the presence of complications.

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Advances in Healthcare Research
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## Appendix

**Table A1. Comorbid Drugs**

| Drug Classes | Drug Name | Dosage | Rules of use | Delivery route | Quantity | Percentage (%) |
|---|---|---|---|---|---|---|
| Antiemetic (For nausea vomiting) | Ondansetron inj | 4mg | 3x1 amp | Intravenously | 33 | 34,74 |
| | Ondansetron tab | 4mg | 3x1 tab | Oral | 1 | 1,05 |
| | Metoclopramide inj | | 2x1 amp | Intravenously | 3 | 3,16 |
| | Sotatic inj® (Metoclopramide HCl) | 5mg/ml | 3x1 amp | Intravenously | 2 | 2,11 |
| | Domperidone tab | 10mg | 3x1 tab | Oral | 15 | 15,79 |
| | Domperidone–Sanmeto 1/2 capsule (Combination) | 1/2 (combination) | 3x1 tab | Oral | 3 | 3,16 |
| | Vometa FT tab 10 mg | 10mg | 3x1 tab | Oral | 21 | 22,11 |
| | Emegran Inj | 3mg | 1x1 amp | intravenously | 2 | 2,11 |
| Antifibrinolytic (For bleeding in dengue) | Tranexamic Acid inj | 500mg | 2x1 | Intravenously | 1 | 1,05 |
| | Kanex Inj | 500mg | 3x1 amp | intravenously | 1 | 1,05 |
| | Sotatic inj | | 2x1 amp | intravenously | 2 | 2,11 |
| Gastrointestinal Medicine (dyspepsia/diarrhea) | Anatasida DOEN tab | 200mg | 3x2 tab | Oral | 2 | 2,11 |
| | Antacids syrup | 60ml | 3x2 tbsp | Oral | 27 | 28,42 |
| | Jelly syrup® (Magaldrate, simethicone) | 100ml | 3x2 tbsp | Oral | 1 | 1,05 |
| | New Diatabs tab | | 3x1 tab | Oral | 1 | 1,05 |
| Gastric Mucosal Protective Drugs | Rebamipide tab | 100mg | 2x1 tab | Oral | 4 | 4,21 |
| | Sucralfate syrup | 100ml | 3x2 tbsp | Oral | 4 | 4,21 |
| | Inpepsa syrup | 200ml | 3x2 tbsp | Oral | 1 | 1,05 |
| Drugs Gastric acid suppressant | Lanceplazole cap | 30mg | 3x1 cap | Oral | 2 | 2,11 |
| | Lansoprasole inj | 30mg | 2x1 vial | intravenously | 4 | 4,21 |
| | Omeprazole cap | 20mg | 3x1 cap | Oral | 3 | 3,16 |
| | Nexium inj® (Esomeprazole) | | 2x1 vial | intravenously | 1 | 1,05 |
| | Nexium Sachet® (Esomeprazole) | 10mg | 2x1 sachet | Oral | 10 | 10,53 |
| | Topazole inj® (Pantoprazole sodium, sesquihydrate) | 40mg | 1x1 vial | intravenously | 3 | 3,16 |
| | Pumpitor inj® (Omeprazole) | 40mg | 1x1 vial | intravenously | 2 | 2,11 |
| | Pranza inj® (Pantoprazole) | 40mg | 2x1 vial | intravenously | 2 | 2,11 |
| | Prazotec inj® (Lansoprazole) | 30mg | 3x1 vial | intravenously | 3 | 3,16 |
| | Lance caps® (Lansoprazole) | 30mg | 1x1 caps | Oral | 1 | 1,05 |
| | Ranitidin inj | 50mg | 3x1 inj | intravenously | 71 | 74,74 |
| | Ranitn inj® (Ranitidin) | 25mg/ml | 1x1 amp | intravenously | 18 | 18,95 |
| | Teza tab® (Tegoprazam) | 50mg | 1x1 tab | Oral | 4 | 4,21 |
| Multivitamins | Becom-C cap® (Vitamin B comp, Vitamin C, | | 3x1 tab | Oral | 1 | 1,05 |

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|---|---|---|---|---|---|---|
| | Nicotinamide, Pantothentic Acid) | | | | | |
| | Curcuma tab | 20mg | 1x1 tab | Oral | 19 | 20,00 |
| | Imunos Syr | 60ml | 1x1 tbsp | Oral | 1 | 1,05 |
| | Imunos plus syr | 60ml | 1x1 tbsp | Oral | 1 | 1,05 |
| | Provit vit 757 inj | 757mg | 1x1 amp | intravenously | 6 | 6,32 |
| | Zinc Tab | 20mg | 1x1 tab | Oral | 1 | 1,05 |
| | Xepazym tab® (Pancreatin, simethicone) | | 3x1 tab | Oral | 5 | 5,26 |
| Neurotropic Drugs/Nerve Support | Lyoven inj | 217mg | 2x1 vial | intravenously | 7 | 7,37 |
| | Neurosanbe 500 mcg inj | 500mcg | 2x1 amp | intravenously | 9 | 9,47 |
| | Neurosanbe 5000 mcg inj | 5000mcg | 2x1 amp | Intravenously | 2 | 2,11 |
| | A Letter to the Editor | 5mg | 1x1 tab | Oral | 4 | 4,21 |
| | Valisanbe inj | 5mg | k/p | intravenously | 1 | 1,05 |
| Anti Anemia | Esofer inj | 40mg | 1x1 vial | intravenously | 1 | 1,05 |
| Antihistamines | Cetirizine tab | 10mg | 1x1 tab | Oral | 4 | 4,21 |
| | Cetirizine 1/3 – lupred caps (Combination) | 1/3 (combination) | 3x1 caps | 0ral | 2 | 2,11 |
| | Cetirizine 1/3 – Methylpred caps (Combination) | 1/3 (combination) | 4x1 caps | Oral | 1 | 1,05 |
| | Flunarizin tab | 5mg | 2x1 tab | Oral | 15 | 15,79 |
| Cough Suppressant (Cough medicine) | OBH syr | 100ml | 3x1 tbsp | Oral | 3 | 3,16 |
| | Codein tab | 10mg | 2x1 tab | Oral | 1 | 1,05 |
| Inhaled corticosteroids (asthma medications) | Pulmicort respul | 0.5mg/ml,2 ml | 2x1 amp | Inhalation | 1 | 1,05 |
| | Inhavent inhalation | | 2x1 amp | Inhalation | 1 | 1,05 |
| Psychotropic | Alprazolam tab | 0.5mg | 1x1 tab | Oral | 6 | 6,32 |
| | Zypraz tab® (Alprazolam) | 0.5mg | 1x1 tab | Oral | 1 | 1,05 |
| Antispasmodic | Hyson inj | 100mg | 1x1 vial | intravenously | 3 | 3,16 |
| Anti-inflammatory | Ketorolac inj | 30mg | 2x1 amp | intravenously | 5 | 5,26 |
| | Maxigesic IV® (Paracetamol and ibuprofen) | | k/p | intravenously | 11 | 11,33 |
| | Norflam caps | | 1x1 cap | Oral | 2 | 2,11 |
| | Nutriflam Neo | | 3x1 tab | Oral | 11 | 1,05 |
| | Lapibal caps | 500mg | 1x1 caps | Oral | 1 | 1,05 |
| Systemic corticosteroids (inflammation) | Dexameth tab | 0.5mg | 1x1 tab | Oral | 1 | 1,09 |
| | Dexamethasone inj | 5mg | 2x1 amp | intravenously | 17 | 17,85 |
| | Methylprednisolone inj | 125mg | 1x1 vial | intravenously | 17 | 17,85 |
| | Lameson inj | 125mg | Extras | intravenously | 2 | 2,11 |
| | Squishy Stuffing | 100mg | 1x1 amp | intravenously | 5 | 5,26 |
| Antibiotics | Azithromycin | 500mg | 1x1 tab | Oral | 7 | 7,37 |
| | Cefotaxim inj | 1gr | 2x1 flc | Intravenously | 2 | 2,11 |
| | Ceftriaxon inj | 1gr | 2x1 flc | Intravenously | 12 | 12,63 |
| | Cefxon inj | 1gr | 2x1 | Intravenously | 2 | 2,11 |
| | Fixacep tab | 200mg | 2x1 tab | Oral | 1 | 1,05 |
| | Stabactam inj | | 3x1 FLC | Intravenously | 2 | 2,11 |
| | Levofloxacin inf | 500mg | 2x1 BTL | Intravenously | 1 | 1,05 |
| | Ofloxacin tab | 400mg | 2x1 tab | Oral | 1 | 1,05 |
| | Anbacin inj | | 2x1 flc | Intravenously | 1 | 1,05 |