

BAB 5

KESIMPULAN DAN SARAN

5.1 Kesimpulan

Berdasarkan hasil penelitian dan pembahasan sebelumnya, maka peneliti dapat menarik beberapa simpulan sebagai berikut.

1. Ada perbedaan efektivitas kemoterapi (PFS) antara kemoterapi gefitinib dan erlotinib dengan selisih 0,7 bulan. Namun hasil analisis statistik dengan uji *Independent T – Test* menunjukkan perbedaan tersebut tidak bermakna ($P > 0,05$).
2. Ada perbedaan total biaya langsung medik antara kemoterapi gefitinib dan erlotinib dengan selisih biaya sebesar Rp 33.252,19. Namun hasil analisis statistik dengan uji *Mann Whitney* menunjukkan perbedaan tersebut tidak bermakna ($P > 0,05$).
3. Kemoterapi gefitinib dengan nilai ACER sebesar Rp 114.954,68 dan PFS 9,4 lebih efektif biaya dibandingkan dengan nilai ACER kemoterapi erlotinib sebesar Rp 148.206,87 dan PFS 8,7 bulan pada pasien NSCLC rawat jalan di RSUD dr. Soetomo Surabaya.

5.2 Saran

Disarankan kepada peneliti selanjutnya agar :

1. Menggunakan jumlah sampel yang lebih banyak.
2. Menggunakan OS (*Overall Survival*) sebagai *outcome* karena OS sebagai landasan untuk menilai kelangsungan hidup, keamanan, dan kualitas hidup pasien.

DAFTAR PUSTAKA

- Alsagaff, H. 2009, *Dasar-Dasar Ilmu Penyakit Paru.* Airlangga University Press, Surabaya.
- American Cancer Society. 2011, Lung Cancer (Non - Small Cell); http://www.cancer.org/acs/groups/cid/documents/webcontent/0031_15.pdf. Accessed on June 2011.
- American Cancer Society, Kanker Fakta & Angka. 2016, Tersedia di <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf>. Accessed on 25 Agustus 2016.
- American Joint Committee on Cancer, *AJCC Staging Manual.* 2010, 7th ed. Springer, New York, 36-40.
- American Lung Association. 2010, *State of Lung Disease in Diverse Communities.* New York city office, New York, 55-62.
- Andayani, T.M. 2013, *Farmakoekonomi Prinsip Dan Metodologi,* Bursa Ilmu,Yogyakarta.
- Berger, M.L., Bingegefors, K., Hedblom, E., Pashos, C.L., Torrance, G., Smith, M.D. 2003, *Health Care Cost, Quality, and Outcomes : ISPOR Book of Terms,* USA : ISPOR.
- Bootman, J. L., Townsend, R. J., and McGhan, W. F. 2005, *Principles of Pharmacoeconomics,* 3rd Ed., 1-18, Harvey Whitney Book Company, USA.
- Bronte, G., Rolfo, C., Giovannetti, E., Cicero, G., Pauwels, P., Passiglia, F., Castiglia, M., Rizzo, S., Vullo, F.L., Fiorentino, E., Meerbeeck, J.V., Russo, A. 2014, Are erlotinib and gefitinib interchangeable, opposite or complementary for non-small cell lung cancer treatment? Biological, pharmacological and clinical aspects. *Critical Review in Oncology/Hematology*, **89**: 300-313.

- Chu, E. and Devita, V.T. 2015, ‘Guidelines for Chemotherapy and Dosing Modifications’, in Copur, S.M., Tiedemann, D., *Harrold, J.L., and Chu, E. Textbook of Physicians Cancer Chemotherapy Drug Manual*, Jones and Bartlett Learning, USA, 467-580.
- Früh, M., De Ruysscher, D., Popat, S., Crinò, L., Peters, S., Felip, E. 2013, Kanker sel kecil paru-paru (SCLC): ESMO Pedoman Praktek Klinis untuk diagnosis, pengobatan dan tindak lanjut, *Ann Oncology*. **1** (6): 99-105.
- Hermes, A., Waschki, B., Reck, M. 2012, Hiponatremia sebagai faktor prognosis kanker paru-paru sel kecil - retrospektif analisis institusi tunggal , *Respirology Medical*, **106** (6): 900- 4.
- Hariyanto, B.E.P., Mantik, M.F.J., Wahani, A. 2015, Kejadian muntah pada pasien kanker yang menjalani pengobatan kemoterapi di RSUP Prof. DR. R. D. Kandou Manado, *Jurnal e-Clinic* **3**(3): 781-784.
- Huq, S. 2010, *Lung Cancer, Non - Small Cell*. Available from : <http://www.emedicinehealth/> Accessed on 20 April 2010.
- Isla, D., Castro, J.D., Grau, S., Orofino, J. 2016, Cost of adverse events associated with erlotinib or afatinib in first – line treatment of advanced EGFR – positive non – small cell lung cancer. *Clinico Economics and Outcome Research*, **35** : 31 – 38.
- Kementerian Kesehatan RI. 2013, *Pedoman Penerapan Kajian Farmakoekonomi*, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Kim, ST., Lee, J., Sun, J. M. 2010, Prognostic model to predict outcomes in non-small cell lung cancer patients with erlotinib as salvage treatment. *Journal Oncology* , **79** :78-84.
- Kumar, V., Cotran, R.S. and Robbins, S.L. (eds) 2013, *Buku ajar patologi*. Diterjemahkan dari Bahasa Inggris oleh I Made Nasar dan Santoso Cornain, Jakarta, 498-505.

- Lee, VWY., Schwander, B., Lee, VHF. 2014, Effectiveness and cost-effectiveness of erlotinib versus gefitinib in first-line treatment of epidermal growth factor receptor activating mutation-positive non-small-cell lung cancer patients, *Hong Kong Medical Journal*, **20(3)**: 178-186.
- Lissowska, J., Foretova, L., Dabek, J. 2010, Riwayat keluarga dan risiko kanker paru-paru: Studi Kasus-Kontrol multisenter internasional di Eropa Timur dan Tengah dan meta-analisis. *Penyebab Kanker Paru* **21(7)**: 101-104.
- Ma, Y., Huang, Y., Zhao, H., Liu, J., Chen, L., Wu, H., Zhou, N. 2013, ZhiThe cost – effectiveness analysis of gefitinib or erlotinib in the treatment of advanced EGFR mutant non – small cell lung cancer patient, *Zhongguo Fei Ai Za Department of Medical Oncology*, **16(4)** : 203-10.
- National Collaborating Centre for Cancer. 2011, *Kanker paru-paru. diagnosis dan pengobatan kanker paru-paru*.Institut Nasional untuk Kesehatan dan Clinical Excellence. London, 121.
- National Comprehensive Cancer Network (NCCN). 2011, Practice Guidelines in Oncology - Asian Consensus Statement non-small cell lung cancer Available from: http://www.nccn.org/professionals/physician_gls/PDF/nscl-asia.pdf. Accessed on 21 Oct 2011.
- National Comprehensive Cancer Network. NCCN Practice Guidelines in Oncology—Non- Small Cell Lung Cancer. 2015, Available from:http://www.nccn.org/professionals/physician_gls/f_guidelines.asp. Accessed on 10 Oct 2015.
- National Institute for Health and Care Excellence (NICE) guidance. 2015, <https://www.nice.org.uk>. Accessed on June 2015.
- Notoatmodjo, S. 2010, *Metodologi Penelitian Kesehatan*. Jakarta : Rineka Cipta
- National Cancer Institute (NCI). 2013, Non - small cell lung cancer treatment. <https://www.nci.org.uk>. Accessed on June 2013.

Pearce, E. 2009, *Anatomi dan Fisiologi Untuk Paramedis*. PT. Gramedia Pustaka Utama, Jakarta.

Pedoman Praktik [Pedoman] NCCN Klinis di Onkologi: Sel Kecil Kanker Paru Vol 1. 2016, National Comprehensive Cancer Network.
http://www.nccn.org/professionals/physician_gls/pdf/sclc.pdf.
Accessed on 2 Oktober 2015.

Peters, S., Adjei, A.A., Gridelli, C., Reck, M., Kerr, K., Felip, E. 2012, Metastatic non – small - cell lung cancer (NSCLC) in *ESMO Clinical Practice Guidelines for diagnosis, treatment and follow up*, Volume 31, *Oxford University Press on behalf of the European Society for Medical Oncology*, 56–64.

Pesch, B., Kendzia, B., Gustavsson, P., Jockel, KH., Johnen, G. 2012, Cigarette smoking and lung cancer – relative risk estimates for the major histological types from a pooled analysis of case – control studies. *International Journal Cancer*, **131 (5)**: 1210- 9.

Phillips, C. 2009, *What Is Cost-Effectiveness*. <http://www.whatissries.co.uk>.
Accessed on 7 Februari 2012.

Pietanza, MC., Krug, LM., Wu, AJ., Kris, MG., Rudin, CM., Travis, WD. 2015, Sel kecil dan Neuroendokrin Tumor paru-paru. in Devita VT Jr, Lawrence TS, Rosenberg SA, *Prinsip Kanker & Praktek Onkologi Kesehatan*, 10th ed., Devita, Hellman, and Wolters Rosenberg Kluwer , Philadelphia, 536-59.

Pradelli, L., Wertheimer, A. 2012, *Pharmacoeconomics Principles and Practice*. Editon. SEEd srl, Torino, 16-20.

Ramadhaniah, F., Mulawarman, A., Suzanna, E., Andalucia, L.R. 2016, Gambaran Kanker Paru Karsinoma Bukan Sel Kecil dengan Efusi Pleura. *Jurnal Respirologi Indonesia*, **36** : 60-66.

Rascati, K. L. 2009, *Essentials of Pharmacoeconomics*, Wolters kluwer, Lippincott Williams and wilkins, London, 1-222.

Rosell, R., Carcereny, E., Gervais, R. 2012, Erlotinib versus standard chemotherapy as first-line treatment for European patients with advanced EGFR mutation-positive non-small-cell lung cancer (EURTAC): A multicentre, open-label, randomised phase 3 trial. *Lancet Oncol*, **13**:239–246.

Stoppler, M. C. 2010, Lung Cancer. Available from : <http://www.emedicinehealth/> Accessed on 20 April 2010.

Syahruddin, E., Jusuf, A. 2015, *Pedoman Nasional Untuk Diagnosis &*

Penatalaksanaan di Indonesia, Kanker Paru Bukan Sel Kecil, PDPI, Indonesia.

Tentua, M. N. 2009, Statistik nonparametric. Available from : <http://meilanynonsi.upy.ac.id/files/statprak/nonparametrik.pdf>. Accessed on June 2009.

Tepi SB, Byrd DR, Compton CC. 2010, *Cancer AJCC Staging Manual*. New York, Springer, **7** : 299-330.

Tjiptoherijanto P. dan Soesetyo, B. (2008), *Ekonomi Kesehatan*. Jakarta: Penerbit Rineka Cipta. 1- 29.

Trisna, Y. 2010, *Aplikasi Farmakoekonomi Dalam Pelayanan Kesehatan*, Available from : www.media-informasi-farmasi-indonesia.com.

Vogenberg, F.R. 2001, *Introduction To Applied Pharmacoeconomics*. Editor: Zollo S. McGraw-Hill Companies, USA.

Wijayanto, A., Burhan, E., Nawas, A., Rochsismandoko. 2015, Faktor Terjadinya Tuberkulosis Paru Pada Pasien Diabetes Melitus Tipe 2. *Jurnal Respirologi Indonesia*, **35** : 1- 11.

Wu, W.S., Chen Y.M., Tsai, C.M., Shih, J.F, Chiu, C.H. 2012, Erlotinib has better efficacy than gefitinib in adenocarcinoma patients without EGFR - activating mutations, but similiar efficacy in patients with EGFR-activating mutations, *Experimental and Therapeutic Medicine*, **3**: 207-213.

Yoshida, T., Yamada, K., Azuma, K., Kawahara, A. 2013, Comparison of adverse events and efficacy between gefitinib and erlotinib in patients with non-small cell lung cancer: a retrospective analysis. *Medicinal oncology*, **30**: 349.

Yusuf, S. F. 2015, *Metodologi Penelitian Kesehatan*, Darmais Press, Padang Sidempuan.

Zhou, C., Wu, YL., Chen, G. 2011, Erlotinib versus chemotherapy as first line treatment for patients with advanced EGFR mutation-positive non-small-cell lung cancer (OPTIMAL, CTONG-0802): a multicentre, open-label, randomised, phase 3 study. *Lancet Oncol*, **12(7)** : 35-42.

Zhou, C., Wu, YL., Chen, G. 2015, Erlotinib versus chemotherapy as first-line treatment for patients with advanced EGFR mutation-positive non-small-cell lung cancer (OPTIMAL, CTONG-0802): a multicentre, open-label, randomised, phase 3 study. *Lancet Oncol*, **12(7)** : 35-42.