

## DAFTAR PUSTAKA

- [1] Rumgay, H., 2020, Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study, *Lancet Oncol*, Vol. 22, No. 8, Hal. 1071–1080.
- [2] Symonds, P., Mils, A., dan Duxbury, A., 2012, Breast Cancer, *Elsevier*, Hal 432-456
- [3] Luz, F., 2022, The effectiveness of radiotherapy in preventing disease recurrence after breast cancer surgery, *Surg. Oncol*, Vol. 41, Hal.101.
- [4] Susworo, R., 2007, *Radioterapi*, UI Press, Jakarta.
- [5] Khan, F., 2014, *The Physics of Radiation Therapy Fifth Edition*, Williams and Wilkins, Philadelphia.
- [6] Sutanto, H., Eko.H., Gede.W., Santi.Y., and Suparman.S., 2018, *Bolus Berbahan Silicone dan Natural Rubber*, Undip Press, Semarang.
- [7] Podgorsak, 2005, *Radiation Oncology Physics: A Handbook for Teachers and Students*, IAEA, Philadelphia.
- [8] Aras, S, Tanzer. I., dan İkizceli. T., 2020, Dosimetric comparison of superflab and specially prepared bolus materials used in radiotherapy practice, *J. Breast Heal.*, vol. 16, no. 3, hal. 167, 2020.
- [9] Khan, Y., 2013, Clinical and dosimetric implications of air gaps between bolus and skin surface during radiation therapy, *J. Cancer Ther.*, vol. 4, no. 7, hal. 1251, 2013.
- [10] Lobo, J., Banerjee.D., Srinivas.S., Ravichandran.C., Putha, S.K., Saxena, P.P., Reddy, S., dan Sunny, 2021, Influence of Air Gap Under Bolus in The Dosimetry of a Clinical 6MV Photon Beam, *Jurnal Med. Physic*, Vol. 45, Hal. 175–181.
- [11] Fan, J., 2021, Fabrication and Application of 3D Printed Bolus for Optimizing Radiotherapy in Superficial Tumor, *Clin. Surg*, Vol. 06, No. 12.
- [12] Park, S., Choi.C., Park.M., Chun.M., Han.J., dan Kim.J, 2021, A patient-specific polylactic acid bolus made by a 3D printer for breast cancer radiation therapy, *PLoS One*, vol. 11, no. 12.
- [13] Stephens, F., 2009, *Basics of Oncology*, Springer-Verlag Berlin Heidelberg, Newyork.
- [14] McGeeney, 2016, New Linear Accelerator at Southwestern Vermont Cancer Center to more effectively treat patients, [https://www.berkshireeagle.com/stories/new-linear-accelerator-at-southwestern-vermont-cancer-centertomore-effectively-treat patients](https://www.berkshireeagle.com/stories/new-linear-accelerator-at-southwestern-vermont-cancer-centertomore-effectively-treatpatients), diakses Januari 2022.
- [15] Wiryosimin, S., 1995, *Mengenal Asas Proteksi Radiasi*, ITB, Bandung.
- [16] Akhadi, M., 2000, *Dasar-Dasar Proteksi Radiasi*, Rineka Cipta, Jakarta.
- [17] Mayles, P., 2007, *Handbook of Radiotherapy Physics Theory and Practice*, Taylor and Francis Group, Newyork.
- [18] Oncology Imaging System, 2020, Radiotherapi and Radiodiagnostic, <https://www.oncologyimaging.com/doseview-3d>, diakses Januari 2022.

- [19] Castro, E., Iniguez F., Samsudin.H., Fang.X., dan Auras.R., 2016, Poly (lactic acid)—Mass production, processing, industrial applications, and end of life, *Adv. Drug Deliv*, vol. 107, hal. 333–366.
- [20] Rodríguez, J., Thomas.J., dan Renaud.J., 2001, Mechanical behavior of acrylonitrile butadiene styrene (ABS) fused deposition materials. Experimental investigation, *Journal Rapid Prototyp*, vol. 107, hal. 333–366.
- [21] Gunham, B., Kemikler G., 2003, Determination of Surface Dose and The Effect of Bolus To Surface Dose In Electron Beams, *Med. Dosim.*, Vol. 28, Hal. 193–198.
- [22] Putra, K., 2018, *Pemanfaatan Teknologi 3D Printing Dalam Proses Desain Produk Gaya Hidup*, Mono Lestari Press, Pontianak.
- [23] Endarko, A., Aisyah.E., Carina.S., Nazara.C., Sekartaji.T., dan Nainggolan, 2020, Evaluation of Dosimetric Properties of Handmade Bolus for Megavoltage Electron and Photon Radiation Therapy, *Jurnal Dosimetri*, Vol. 28, Hal. 193–198.
- [24] American Society for testing and Material, 2016, *Standard Test Methods for Size, Dimensional Measurements, and Bulk Density of Refractory Brick and Insulating Firebrick*, ASTM Internasional, United States.
- [25] American Society for testing and Material, 2010, *Standard Test Methods for Apparent Porosity, Water Absorption, Apparent Specific Gravity, and Bulk Density of Burned Refractory Brick and Shapes by Boiling Water*, ASTM Internasional, United States.
- [26] Ricotti, R., 2017, Dosimetric characterization of 3D printed bolus at different infill percentage for external photon beam radiotherapy, *Phys. Medical*, Vol. 39, Hal. 25–32.
- [27] Hellstrom, Kristina, Atila, dan Lucian, 2017, A Broad Literature Review of Density Measurements of Liquid Cast Iron, *Metals (Basel)*, vol. 7, hal. 165–185.
- [28] Blumm, J., 2000, Measurement of the Volumetric Expansion Bulk Density of Metals in the Solid and Molten Regions, *High Temp. Press.*, vol. 32, hal. 109–113.
- [29] Anthony, 1992 , Heigh Precision Uranium,Thorium and Radium Isotope Ratio Measurements by High Dynamic range Thermal Ionisation Mass Spectrom, *Int. J. Mass Spectrom. Ion Process.*, vol. 116, hal. 71–78.
- [30] Muhammad, Ridara, R., dan Masrullita, 2020, Sintesis Bioplastik dari Pati Biji Alpukat Dengan Bahan Pengisi Kitosan, *J. Teknol. Kim. Unimal*, vol. 9, no. 2, hal. 1–11.
- [31] Sultan, M., Imran, dan Litlol.F., 2-18, Korelasi porositas beton terhadap kuat tekan rata-rata, *J. Teknol. SIPIL*, vol. 2, no. 2, hal. 57–63.
- [32] Bari, M., 2021, Optimasi parameter proses pada 3d printing fdm terhadap kekuatan tarik filament pla food grade menggunakan metode taguchi l27, *tesis*, Politeknik Manufaktur Negri Bangka Belitung..
- [33] Chantika, L. 2021, Perbandingan dosis serap bolus berbahan plastisin dengan bolus berbahan silicone rubber, *Jurnal Fisika Unand*, vol 70, No.3, hal 11-19.

- [34] Hariyanto, H., Fachrina, A., Levina, U., Endarko, E., dan Bambang, E., 2020, Fabrication and characterization of bolus material using propylene glycol for radiation therapy, *Iran. J. Med. Phys.*, vol. 70, no. 3, hal. 161–169.
- [35] Khalef-Ezra, J., Karantanas, A., Koligliatis, T., dan Boziari, A., 1998, Electron Density of Tissues and Breast Cancer Radiotherapy: A Quantitative CT Study , *Physics Constriction*, vol. 41, no. 5, hal. 1209–1214.

