

## DAFTAR PUSTAKA

- Abdi, AI. (2024). Glioma grading using an optimized T1-weighted dynamic contrast-enhance magnetic resonance imaging paradigm. *Egyptian Journal of Radiology and Nuclear Medicine*, 55:37. <https://doi.org/10.1186/s43055-024-01189-z>
- Abu O, Rahman A, Khan R, Alam S, Barua K, Chaurasia B. (2020). Magnetic Resonance Spectroscopy for Prediction of Grades of Diffusely Infiltrating Intracranial Astrocytomas. *J Neurosci Rural Pract*, 11(4), 581–584.
- Ahir, B. K., Engelhard, H. H., & Lakka, S. S. (2020). Tumor Development and Angiogenesis in Adult Brain Tumor: Glioblastoma. *Molecular Neurobiology*, 57(5), 2461–2478. <https://doi.org/10.1007/s12035-020-01892-8>
- Appin, C. L., & Brat, D. J. (2015). Biomarker-driven diagnosis of diffuse gliomas. *Molecular Aspects of Medicine*, 45, 87–96. <https://doi.org/10.1016/j.mam.2015.05.002>
- Arzanforoosh, F., Van der Velden, M., Berman, A. J. L., Van der Voort, S. R., Bos, E. M., Schouten, J. W., Vincent, A. J. P. E., Kros, J. M., Smits, M., & Warnert, E. A. H. (2024). MRI-Based Assessment of Brain Tumor Hypoxia: Correlation with Histology. *Cancers*, 16(1), 138
- Ballabh, P., Braun, A., & Nedergaard, M. (2004). The blood-brain barrier: An overview: Structure, regulation, and clinical implications. *Neurobiology of Disease*, 16(1), 1–13. <https://doi.org/10.1016/j.nbd.2003.12.016>
- Bitaria, E. (2020). *Hubungan Ekspresi Imunohistokimia Vascular Endothelial Growth Factor (VEGF) dengan Grading Histopatologi Astrocytoma di RSUP H. Adam Malik Medan*. <http://repository.usu.ac.id/handle/123456789/25480>
- Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A., & Jemal, A. (2018). Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: A Cancer Journal for Clinicians*, 68(6), 394–424. <https://doi.org/10.3322/caac.21492>
- Chishty, I. A., Rafique, M. Z., Hussain, M., Akhtar, W., Ahmed, M. N., Sajjad, Z., & Ali, S. Z. (2010a). MRI characterization and histopathological correlation of primary intra-axial brain glioma. *Journal of the Liaquat University of Medical and Health Sciences*, 9(2), 64–69.
- Chishty, I. A., Rafique, M. Z., Hussain, M., Akhtar, W., Ahmed, M. N., Sajjad, Z., & Ali, S. Z. (2010b). MRI characterization and histopathological correlation of primary intra-axial brain glioma. *Journal of the Liaquat University of Medical and Health Sciences*, 9(2), 64–69.

- Collins, V. P., Jones, D. T. W., & Giannini, C. (2015). Pilocytic Astrocytoma: pathology, molecular mechanisms and markers. *Acta Neuropathologica*, 129(6), 775–788. <https://doi.org/10.1007/s00401-015-1410-7>
- D'Alessio, A., Proietti, G., Sica, G., & Scicchitano, B. M. (2019). Pathological and molecular features of glioblastoma and its peritumoral tissue. *Cancers*, 11(4). <https://doi.org/10.3390/cancers11040469>
- Dean, B. L., Drayer, B. P., Bird, C. R., Flom, R. A., Hodak, J. A., Coons, S. W., & Carey, R. G. (1990). Gliomas: Classification with MR imaging. *Radiology*, 174(2), 411–415. <https://doi.org/10.1148/radiology.174.2.2153310>
- DeWitt, J. (2022). CNS and Pituitary Tumours. Glioma, Glioneuronal tumors, and neuronal tumors *Astrocytoma*, IDH mutant. *PathologyOutlines.com* website. <https://www.pathologyoutlines.com/topic/CNStumorgliomasAstrocytomasIDHmutant.html>. Accessed May 27th, 2024.
- Ding, C., & Tihan, T. (2019). Recent progress in the pathology and genetics of pilocytic and pilomyxoid *Astrocytomas*. *Balkan Medical Journal*, 36(1), 3–11. <https://doi.org/10.4274/balkanmedj.2018.1001>
- Dorsey, JF., Salinas, R. D., Dang, M., Alonso-Basanta, M., Judy, K. D., Maity, A., Lustig, R. A., Lee, J. Y. K., Phillips, P. C., & Pruitt, A. A. (2020a). Cancer of the Central Nervous System. In *Abeloff's Clinical Oncology* (Sixth Edit). Elsevier Inc. <https://doi.org/10.1016/b978-0-323-47674-4.00063-3>
- Dorsey, JF., Salinas, R. D., Dang, M., Alonso-Basanta, M., Judy, K. D., Maity, A., Lustig, R. A., Lee, J. Y. K., Phillips, P. C., & Pruitt, A. A. (2020b). Cancer of the Central Nervous System. In *Abeloff's Clinical Oncology* (Sixth Edit). Elsevier Inc. <https://doi.org/10.1016/b978-0-323-47674-4.00063-3>
- Dorsey JF, Salinas RD, Dang M, et al. (2014). Brain and Spinal Cord Tumors in Adult What is cancer? What are brain and spinal cord tumors? *Cancer.Org | 1.800.227.2345, 938-1001.e16*. <https://doi.org/https://doi.org/10.1016/B978-1-4557-2865-7.00066-7>
- Elousrouti, L. T., Lamchahab, M., Bougtoub, N., Elfatemi, H., Chbani, L., Harmouch, T., Maaroufi, M., & Amarti Riffi, A. (2016). Subependymal giant cell *Astrocytoma* (SEGA): A case report and review of the literature. *Journal of Medical Case Reports*, 10(1), 1–4. <https://doi.org/10.1186/s13256-016-0818-6>
- Febrawati,E.B., dan Laksmi,L,I.B.(2020). Hubungan Ekspresi Imunohistokimia *Vascular Endothelial Growth Factor (VEGF)* dengan *Grading Histopatologi Astrocytoma* di RSUP H. Adam Malik Medan.
- Fisher, J. L., Schwartzbaum, J. A., Wrensch, M., & Berger, M. S. (2006). Evaluation of epidemiologic evidence for primary adult brain tumor risk

- factors using evidence-based medicine. *Progress in Neurological Surgery*, 19, 54–79. <https://doi.org/10.1159/000095179>
- Haydar, N., Alyousef, K., Alanan, U., Issa, R., Baddour, F., Al-Shehabi, Z., & Al-Janabi, M. H. (2022). Role of Magnetic Resonance Imaging (MRI) in grading gliomas comparable with pathology: A cross-sectional study from Syria. *Annals of Medicine and Surgery*, 82, 104679
- Hasan, M. M., Kadir, M. L., Uddin, K. H., Rana, M. S., Khan, U. K. S., Hossain, M. M., Hafiz, A. M., Islam, M. S., Mukherjee, S. K., & Hossain, M. A. (2020). Correlation between Magnetic Resonance Imaging (MRI) Findings with Histological Grading of Patients with Supratentorial Diffusely Infiltrating Astrocytomas. *Bangladesh Journal of Neurosurgery*, 10(1), 61–74. <https://doi.org/10.3329/bjns.v10i1.49165>
- Howe, F. A., Barton, S. J., Cudlip, S. A., Stubbs, M., Saunders, D. E., Murphy, M., Wilkins, P., Opstad, K. S., Doyle, V. L., McLean, M. A., Bell, B. A., & Griffiths, J. R. (2003). Metabolic profiles of human brain tumors using quantitative in vivo 1H magnetic resonance spectroscopy. *Magnetic Resonance in Medicine*, 49(2), 223–232. <https://doi.org/10.1002/mrm.10367>
- Ida, C. M., Rodriguez, F. J., Burger, P. C., Caron, A. A., & M, J. S. (2015). Pleomorphic XanthoAstrocytoma: Natural History and Long- Term Follow-Up. *Brain Pathol. Author Manuscript*, 25 (5), 575–586. <https://doi.org/10.1111/bpa.12217.Pleomorphic>
- Ideguchi, M., Kajiwara, K., Goto, H., Sugimoto, K., Nomura, S., Ikeda, E., & Suzuki, M. (2015). MRI findings and pathological features in early-stage glioblastoma. *Journal of Neuro-Oncology*, 123(2), 289–297. <https://doi.org/10.1007/s11060-015-1797-y>
- Inoue, H., Aihara, M., Tomioka, M., & Watabe, Y. I. (2013). Specific enhancement of vascular endothelial growth factor (VEGF) production in ischemic region by alprostadiol - potential therapeutic application in pharmaceutical regenerative medicine. *Journal of Pharmacological Sciences*, 122(2), 158–161. <https://doi.org/10.1254/jphs.13033SC>
- Kabel, M. A., Modais, K., Salim, A., Ahmad, R., Ahmad, A., & A. Alnumari, K. (2018). Astrocytoma: Insights into Risk Factors, Pathogenesis, Diagnosis and Management. *Journal of Cancer Research and Treatment*, 6(3), 70–73. <https://doi.org/10.12691/jcrt-6-3-2>
- Kalpathy-Cramer, J., Gerstner, E. R., Emblem, K. E., Andronesi, O., & Rosen, B. (2015). Advanced Magnetic Resonance Imaging of the Physical Processes in Human Glioblastoma. 74(17), 4622–4637. <https://doi.org/10.1158/0008-5472.CAN-14-0383.Advanced>

- Kim, B. soo, & Gutierrez, J. E. (2012). Contrast-enhanced MR imaging in neuroimaging. *Magnetic Resonance Imaging Clinics of North America*, 20(4), 649–685. <https://doi.org/10.1016/j.mric.2012.07.003>
- Kristiani, E. (2018). Gambaran Klinikopatologik *Astrocytoma* High Grade. *Medicinus*, 4(9), 302–312. <https://doi.org/10.19166/med.v4i9.1190>
- Kumar K, et al. (2017). Basic pathology. In *Buku Ajar Patologi Robbins. Edisi 9. Elsevier*. <https://doi.org/10.1136/jcp.47.1.95-d>
- Kumar K, Abbas AK, A. J. (2017). Basic pathology. In *Buku Ajar Patologi Robbins. Edisi 9. Elsevier*. <https://doi.org/10.1136/jcp.47.1.95-d>
- Law, M., Yang, S., Wang, H., Babb, J. S., Johnson, G., Cha, S., Knopp, E. A., & Zagzag, D. (2003). Glioma Grading: Sensitivity, Specificity, and Predictive Values of Perfusion MR Imaging and Proton MR Spectroscopic Imaging Compared with Conventional MR Imaging. *American Journal of Neuroradiology*, 24(10), 1989–1998.
- Lee, E. J., Lee, S. K., Agid, R., Bae, J. M., Keller, A., & Terbrugge, K. (2008). Preoperative grading of presumptive low-grade *Astrocytomas* on MR imaging: Diagnostic value of minimum apparent diffusion coefficient. *American Journal of Neuroradiology*, 29(10), 1872–1877. <https://doi.org/10.3174/ajnr.A1254>
- Linnerbauer, M., & Rothhammer, V. (2020). Protective Functions of Reactive Astrocytes Following Central Nervous System Insult. *Frontiers in Immunology*, 11(September), 1–18. <https://doi.org/10.3389/fimmu.2020.573256>
- Louis, D. N., Perry, A., Reifenberger, G., von Deimling, A., Figarella-Branger, D., Cavenee, W. K., Ohgaki, H., Wiestler, O. D., Kleihues, P., & Ellison, D. W. (2016a). The 2016 World Health Organization Classification of Tumors of the Central Nervous System: a summary. *Acta Neuropathologica*, 131(6), 803–820. <https://doi.org/10.1007/s00401-016-1545-1>
- Louis, D. N., Perry, A., Reifenberger, G., von Deimling, A., Figarella-Branger, D., Cavenee, W. K., Ohgaki, H., Wiestler, O. D., Kleihues, P., & Ellison, D. W. (2016b). The 2016 World Health Organization Classification of Tumors of the Central Nervous System: a summary. *Acta Neuropathologica*, 131(6), 803–820. <https://doi.org/10.1007/s00401-016-1545-1>
- Lu-Emerson, C., Duda, D. G., Emblem, K. E., Taylor, J. W., Gerstner, E. R., Loeffler, J. S., Batchelor, T. T., & Jain, R. K. (2015). Lessons from anti-*vascular* endothelial growth factor and anti-*vascular* endothelial growth factor receptor trials in patients with Glioblastoma. *Journal of Clinical Oncology*, 33(10), 1197–1213. <https://doi.org/10.1200/JCO.2014.55.9575>

- Lugano, R., Ramachandran, M., & Dimberg, A. (2020). Tumor angiogenesis: causes, consequences, challenges and opportunities. *Cellular and Molecular Life Sciences*, 77(9), 1745–1770. <https://doi.org/10.1007/s00018-019-03351-7>
- Maulida, N. S., Susanto, E., & Murniati, E. (2017). "Prosedur Pemeriksaan Magnetic Resonance Imaging (MRI) Brain Perfusion dengan Metode Arterial Spin Labeling (ASL) pada Pasien Tumor." *Jurnal Radiografer Indonesia*, ISSN 2620-9950.
- Mescher, A. L. (2011). *Histologi Dasar Junqueira Teks & Atlas* (Frans & Dany, Eds.; 12th ed., Vol. 12).
- Naeem A, et al. (2024) Accuracy of MRI in Detecting 1p/19q Co-deletion Status of Gliomas: A Single-Center Retrospective Study. *Cureus* 16(1): e51863. DOI 10.7759/cureus.51863
- Ostrom, Q. T., Cioffi, G., Gittleman, H., Patil, N., Waite, K., Kruchko, C., & Barnholtz-Sloan, J. S. (2019). CBTRUS Statistical Report: Primary Brain and Other Central Nervous System Tumors Diagnosed in the United States in 2012-2016. *Neuro-Oncology*, 21, V1–V100. <https://doi.org/10.1093/neuonc/noz150>
- Palsgrove, D. N., Brosnan-Cashman, J. A., Giannini, C., Raghunathan, A., Jentoft, M., Bettegowda, C., Gokden, M., Lin, D., Yuan, M., Lin, M. T., Heaphy, C. M., & Rodriguez, F. J. (2018). Subependymal giant cell *Astrocytoma*-like *Astrocytoma*: a neoplasm with a distinct phenotype and frequent neurofibromatosis type-1-association. *Modern Pathology*, 31(12), 1787–1800. <https://doi.org/10.1038/s41379-018-0103-x>
- Park, S. A., Jeong, M. S., Ha, K. T., & Jang, S. B. (2018). Structure and function of vascular endothelial growth factor and its receptor system. *BMB Reports*, 51(2), 73–78. <https://doi.org/10.5483/BMBRep.2018.51.2.233>
- Patibandla, M., Thotakura, A., Uppin, M., Challa, S., Addagada, G., & Nukavarapu, M. (2016). Parietal pilomyxoid *Astrocytoma* with recurrence in 10 months: A case report and review of literature. *Asian Journal of Neurosurgery*, 11(3), 323. <https://doi.org/10.4103/1793-5482.145158>
- Petrova, V., Annicchiarico-Petruzzelli, M., Melino, G., & Amelio, I. (2018). The hypoxic tumour microenvironment. *Oncogenesis*, 7(1). <https://doi.org/10.1038/s41389-017-0011-9>
- Pollack, I. F., Agnihotri, S., & Broniscer, A. (2019). Childhood brain tumors: current management, biological insights, and future directions. *J Neurosurg Pediatr*, 261–273. <https://doi.org/10.3171/2018.10.PEDS18377.Childhood>

Priyanto,B.,Rohadi.,Siradz,BF. (2018).Policytic Astrocytoma Cerebellum. Jurnal Kedokteran Unram 2018, 7 (4): 27-32.

Rainer, E., Wang, H., Traub-Weidinger, Widhalm, G., Chang, J. L., Zhu, Z., Marosi, C., Haug, A., Hacker, M. arcus, & Li, S. (2018a). The prognostic value of [123I]-vascular endothelial growth factor ([123I]-VEGF) in glioma. *European Journal of Nuclear Medicine and Molecular Imaging*, 45(13), 2396–2403.

<http://www.embase.com/search/results?subaction=viewrecord&from=export&id=L623352848%0A><https://dx.doi.org/10.1007/s00259-018-4088-y>

Rainer, E., Wang, H., Traub-Weidinger, Widhalm, G., Chang, J. L., Zhu, Z., Marosi, C., Haug, A., Hacker, M. arcus, & Li, S. (2018b). The prognostic value of [123I]-vascular endothelial growth factor ([123I]-VEGF) in glioma. *European Journal of Nuclear Medicine and Molecular Imaging*, 45(13), 2396–2403.

Rattner, A., Williams, J., & Nathans, J. (2019). Roles of HIFs and VEGF in angiogenesis in the retina and brain. *Journal of Clinical Investigation*, 129(9), 3807–3820. <https://doi.org/10.1172/JCI126655>

Retnani, D. P., & Fauziah, D. (2013). Pola Ekspresi Vascular Endothelial Growth Factor ( VEGF ) Dikaitkan dengan Pertumbuhan Tumor dan Edema Peritumoral pada Astrocytoma. *Patologi*, 22(3), 24–29.

Reuss, D. E., Mamatjan, Y., Schrimpf, D., Capper, D., Kratz, A., Sahm, F., Koelsche, C., Olar, A., Hartmann, C., & Reijneveld, J. C. (2015). IDH mutant diffuse and anaplastic Astrocytomas have similar age at presentation and little difference in survival: a grading problem for WHO. *Acta Neuropathol*, 129(6), 867–873. <https://doi.org/10.1007/s00401-015-1438-8.IDH>

Rizk, O. M., Saied, E. M., & El-Maqusod, D. E. A. (2016a). *Angiogenesis in Astrocytomas: An immunohistochemical study of VEGF, factor VIII, and COX-2 expression.* 31(5), 3–6. <https://doi.org/10.7537/marscbj060416.12.Keywords>

Rizk, O. M., Saied, E. M., & El-Maqusod, D. E. A. (2016b). *Angiogenesis in Astrocytomas: An immunohistochemical study of VEGF, factor VIII, and COX-2 expression.* 31(5), 3–6. <https://doi.org/10.7537/marscbj060416.12.Keywords>

Roslavtceva, V. V., Salmina, A. B., Prokopenko, S. V., Pozhilenkova, E. A., Kobanenko, I. V., & Rezvitskaya, G. G. (2016). The role of vascular endothelial growth factor in the regulation of development and functioning of the brain: New target molecules for pharmacotherapy. *Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry*, 10(4), 300–309. <https://doi.org/10.1134/S1990750816040053>

- Saragih, F. R., Suryanti, S., & Hernowo, B. S. (2017). *Korelasi Imunoekspresi EGFR dan mTOR dengan Grading Histopatologi Astrocytoma Correlation EGFR and mTOR Immunoexpression with Histopathological Grading Astrocytoma.* 1, 478–486.
- Sarah, M. K., Bruno, D. M., Frank, G., & C, G. (2015). Imaging features of low-grade diffuse *Astrocytoma* variants and implication for pre-biopsy diagnosis. *Journal of Medical Imaging and Radiation Oncology*, 59(June 2016), 185. <https://doi.org/10.1594/ranzcr2015/R-0051>
- Shukla, G., Alexander, G. S., Bakas, S., Nikam, R., Talekar, K., Palmer, J. D., & Shi, W. (2017). Advanced magnetic resonance imaging in glioblastoma: A review. *Chinese Clinical Oncology*, 6(4). <https://doi.org/10.21037/cco.2017.06.28>
- Smirniotopoulos, J. G., Frances M. Murphy, Rushing, E. J., & Rees, J. H. (2007). Patterns of Contrast Enhancement in the Brain and Meninges. *Radiographics*, 21(6), 525–552.
- Smith, D., Johnson, M., Brown, A., et al. (2013). Limitations of Magnetic Resonance Imaging in the Diagnosis of Small Brain Lesions and Microscopic Brain Changes: A Review. *Neurology Research International*, Volume 2013, Article ID 181076. Strong, M. J., & Garces, J. (2016). Brain Tumors: Epidemiology and Current Trends in Treatment. *Journal of Brain Tumors & Neurooncology*, 01(01). <https://doi.org/10.4172/2475-3203.1000102>
- Stupp, R., Brada, M., van den Bent, M. J., Tonn, J. C., & Pentheroudakis, G. (2014). High-grade glioma: ESMO clinical practice guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*, 25(March), 93–101. <https://doi.org/10.1093/annonc/mdu050>
- Takano, S., Ishikawa, E., Matsuda, M., Sakamoto, N., Akutsu, H., Yamamoto, T., & Matsumura, A. (2017). The anti-angiogenic role of soluble-form VEGF receptor in malignant gliomas. *International Journal of Oncology*, 50(2), 515–524. <https://doi.org/10.3892/ijo.2016.3810>
- Ulya, I., & Haryono, Y. (2016). Pemberian Kemoterapi pada Pasien Dugaan High Grade *Astrocytoma* tanpa Biopsi. *Jurnal Aksona*, Volume 1, Nomor 3, September-Desember 2016, halaman 69–72.
- Vanhaebost, J., & Lelotte, J. (2019). Subependymal giant cell *Astrocytoma*: an unexpected finding during a forensic autopsy. *Acta Neurologica Belgica*, 119(3), 477–479. <https://doi.org/10.1007/s13760-019-01164-w>

- Verreault, M. (2011). Improving Treatment Outcomes in Models of Glioblastoma Cancer. *ResearchGate*.
- Walker, C., Baborie, A., Crooks, D., Wilkins, S., & Jenkinson, M. D. (2011). Biology, genetics and imaging of glial cell tumours. *British Journal of Radiology*, 84(SPEC. ISSUE 2). <https://doi.org/10.1259/bjr/23430927>
- Wang, N., Jain, R. K., & Batchelor, T. T. (2017). New Directions in Anti-Angiogenic Therapy for Glioblastoma. *Neurotherapeutics*, 14(2), 321–332. <https://doi.org/10.1007/s13311-016-0510-y>
- Watanabe, N., Ishikawa, E., Kohzuki, H., Sakamoto, N., Zaboronok, A., Matsuda, M., Shibuya, M., & Matsumura, A. (2020). Malignant transformation of pleomorphic xanthoAstrocytoma and differential diagnosis: Case report. *BMC Neurology*, 20(1), 7–11. <https://doi.org/10.1186/s12883-020-1601-2>
- Weis, S., Sonnberger, M., Dunzinger, A., Voglmayr, E., Aichholzer, M., Kleiser, R., & Strasser, P. (2019). Anaplastic Astrocytoma WHO Grade III. *Imaging Brain Diseases, Zülch 1979*, 1347–1360. <https://doi.org/10.1007/978-3-7091-1544-2>
- World Health Organization. (2020). Cancer Incident in Indonesia. *International Agency for Research on Cancer*, 858, 1–2.
- Xu, G. Z., Liu, Y., Zhang, Y., Yu, J., & Diao, B. (2015). Correlation between VEGFR2 rs2071559 polymorphism and glioma risk among Chinese population. *International Journal of Clinical and Experimental Medicine*, 8(9), 16724–16728.
- Yadav, L., Puri, N., Rastogi, V., Satpute, P., & Sharma, V. (2015). Tumour angiogenesis and angiogenic inhibitors: A review. *Journal of Clinical and Diagnostic Research*, 9(6), XE01–XE05. <https://doi.org/10.7860/JCDR/2015/12016.6135>
- Yan, J., Cheng, J., Liu, F., & Liu, X. (2018). Pleomorphic xanthoAstrocyomas of adults: MRI features, molecular markers, and clinical outcomes. *Scientific Reports*, 8(1), 1–11. <https://doi.org/10.1038/s41598-018-32273-w>
- Yang, J., Zhao, Z., & Zhong, X. (2017). Correlation analysis of the clinicopathological features of glioma and expression of p53 and VEGF. *International Journal of Clinical and Experimental Medicine*, 10(2), 3606–3611.
- Yousem, D. M., & Grossman, R. I. (2010). *Neuroradiology* (J. H. 1 Thral, Ed.; 3rd ed.). Mosby, Inc., an affiliate of Elsevier Inc.
- Yu, D., Han, G., Liu, H., Gao, L., & Verma, V. (2019). Treatment of adult brainstem glioma with combined antiangiogenic therapy: A case report and literature

review. *OncoTargets and Therapy*, 12, 1333–1339.  
<https://doi.org/10.2147/OTT.S195783>

